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ADVANCE ACCOUNTING PROBLEMS

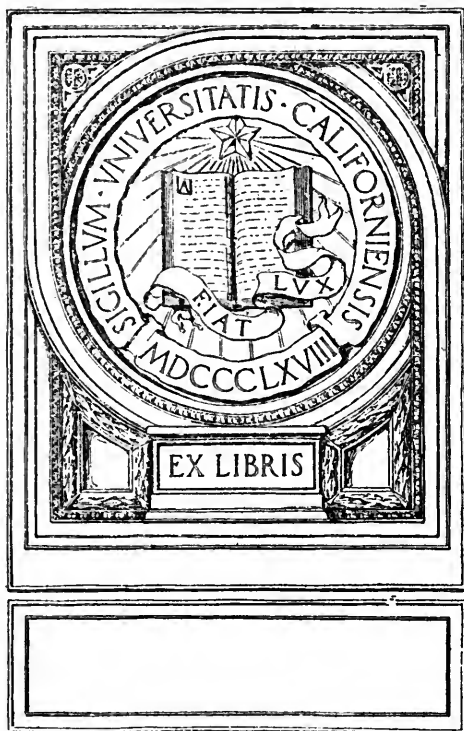
WITH EXPLANATORY NOTES

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With Explanatory Notes

PREPARED BY

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PART I

PARTNERSHIP ACCOUNTS

While the accounting problems peculiar to partnerships offer no principles that are essentially new, yet in no branch of accounting does the application of those principles require any more complete knowledge of all details and more accurate and logical reasoning in order to arrive at equitable results. In fact, partnership adjustments and liquidations as a rule require more of the mathematical ability to do abstract reasoning than a technical training in accounting. In other words, most partnership problems would be easily possible of solution if one did not understand even the meaning of debit and credit.

A knowledge of the general principles of partnership law is essential to the proper handling of problems arising from partnership affairs. Partnerships are the oldest form of association for business purposes and as they are organized under the common law, no statutory requirements must be complied with as is the case in organizing a corporation. As these agreements are often made orally and by implication, there is no written record of the understanding between the partners as to how the affairs are to be administered or as to the respective interests of the partners in the business. Even when the agreement is in writing, the terms thereof are often vaguely and incompletely expressed, leaving certain essential things to be implied or to be settled by the courts. These circumstances have given rise to numerous legal decisions pertaining to partnership affairs which form the basis of settlement in all disputed cases. An attempt will be made in these notes to discuss the general principles underlying partnership accounts as deduced from law and practice and to illustrate these principles by concrete cases.

Division of Profits

In the absence of any agreement between the partners as to how profits shall be shared, the law will give each partner an equal share. By agreement between partners, profits may be shared in any one of the following ways:

1. In proportion to the amount of capital originally contributed.
2. In proportion to the ratio existing between the capital accounts at the time of dividing profits.
3. In any proportion agreed upon, regardless of original investment or whether a certain partner has made any investment.

Losses are always borne in the same proportion as profits are shared.

Interest of a Partner in the Partnership

The interest of a partner at any time is represented by his investment less drawings plus his share of the profits, or minus his share of the losses.

It is always necessary to distinguish between the division of profits and a share in the partnership assets. The division of profits as has been stated is always in accordance with the terms of the partnership agreement, or equally, if there was no agreement on that point; the share of a partner in the partnership assets is always determined by his Capital account, either standing alone or in conjunction with his Drawing or Current account.

Accounts with Partners

There are different accounts which may be kept with partners and different methods of handling them, as follows:

1. The Capital account of each partner may be credited with the investment, and with the proper share of the profits, and debited with the drawings and with the proper share of the losses; in other words, only one account may be kept with each partner.

2. A Capital account may be kept with each partner and credited only with the original investment and with any permanent additions thereto. If the desire is to keep this account intact, it is necessary to open a separate Drawing or Current or Personal account with each partner, charging such an account with the drawings and with the net loss and crediting it with profits. At the close of the fiscal period, the Drawing account would be balanced and the balance carried forward into the next period. In case the accounts are kept in this way, the net worth of a partner is determined by combining the balance of the Capital account with the Drawing account.

3. Where there is no desire to keep the original investment intact, a Capital and a Drawing account may be kept with each partner as explained above, and the balance of the Drawing account closed into the Capital account at the end of a fiscal period.

4. If it is agreed that each partner shall be credited periodically with his salary allowance, a third account should be kept, called a Salary account. This account would be credited periodically with the salary allowance and charged with all drawings against the same. If the partners so desire, the salary accounts may be left open from year to year, the undrawn or overdrawn balance being carried forward into the succeeding year. Such balances should be shown in the Balance Sheet under Accounts Receivable or Payable and not as a part of the net worth.

Each partner who gives all or any portion of his time to the business should receive a salary allowance which should be debited in monthly instalments to the proper expense account and credited to the Drawing account of the partner, or better, to a Salary account as suggested above. It is only in this way that a proper charge is made against profits covering the necessary expense of managerial services; consequently, the net profits arrived at if partners' salaries are not considered would not reflect the true result of the business operations.

As explained hereafter, if interest is to be allowed on capital invested in the business and charged on drawings, the proper credits and charges on account of interest should be to the Drawing account if one is kept; otherwise, to the Capital account.

If profits or losses are to be distributed on the basis of the original investment it becomes necessary to keep a separate Drawing or Current account with each partner, the balance of which should not be closed into the Capital account.

If profits or losses are divided in some fixed proportion it is optional whether we carry forward the balance of the Drawing account into the next period or close it into the Capital account.

If profits are shared on the basis of the partnership interest in the business at the time of closing the books, the Drawing accounts should be closed into the Capital accounts.

ADMISSION OF A PARTNER

(From Hatfield's "Modern Accounting")

A certain Balance Sheet shows:

BALANCE SHEET

Merchandise	\$5,000	Capital Account	\$5,000
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The trader agrees to admit B and give him one half of the profits if he contributes \$6,000. This done, the Balance Sheet shows:

BALANCE SHEET OF A AND B

Merchandise	\$5,000	A, Capital Account	\$5,000
Cash	6,000	B, Capital Account	6,000
	<hr/>		<hr/>
	\$11,000		\$11,000

The basis of the division of profits here differs from the proportion of capital contributed by each, which is legal and not uncommon in practice. But had the agreement been that the contribution of \$6,000 by B entitled him to a half interest in the business the accounts would need different treatment. The half interest being secured by a contribution of \$6,000 it implies that A, too, has a similar interest of \$6,000 and consequently, accepting the valuation of the goods at \$5,000 as correct, that he is construed as contributing goodwill of \$1,000 as well as the merchandise, thus giving:

BALANCE SHEET OF A AND B

Merchandise	\$5,000	A, Capital Account	\$6,000
Good will	1,000	B, Capital Account	6,000
Cash	6,000		
	<hr/>		<hr/>
	\$12,000		\$12,000

Similarly if the arrangement specifies that B's contribution of \$6,000 gives him a three-fifths interest in the business, NOT three-fifths of the profits, and the merchandise still being accepted as worth \$5,000, B must be construed as bringing into the firm business connections, or other elements of Goodwill, to such a value that his total contribution represents one and one-half times the value of A's merchandise, or:

BALANCE SHEET OF A AND B

Merchandise	\$5,000	A, Capital Account	\$5,000
Good will	1,500	B, Capital Account	7,500
Cash	6,000		
	<hr/>		<hr/>
	\$12,500		\$12,500

It is also necessary to distinguish between one who buys, say, a third interest in a firm from the members of the firm and one who enters the partnership with a third interest. Thus, if A and B are in business together with the following showing:

BALANCE SHEET OF A AND B

Miscellaneous Assets	\$60,000	A, Capital Account	\$20,000
		B, Capital Account	40,000
	<hr/>		<hr/>
	\$60,000		\$60,000

C might, if it were mutually agreed upon, buy a third interest in the firm from B paying therefor \$20,000, which would give as the Balance Sheet of the new firm:

BALANCE SHEET OF A AND B AND C

Miscellaneous Assets	\$60,000	A, Capital Account	\$20,000
		B, Capital Account	20,000
		C, Capital Account	20,000
	<hr/>		<hr/>
	\$60,000		\$60,000

But if he were admitted to the firm with a one-third interest, the showing, provided he contributed the book value of his share in the business, would have been as follows:

BALANCE SHEET OF A AND B AND C

Miscellaneous Assets	\$60,000	A, Capital Account	\$20,000
Cash	30,000	B, Capital Account	40,000
		C, Capital Account	30,000
	<hr/>		<hr/>
	\$90,000		\$90,000

(This completes the quotation from Hatfield)

The general principle, therefore, to be followed in problems involving the admission of a partner is as follows:

If a partner invests a certain sum of money in a business with the understanding that he is to receive a certain share of the profits, his capital account would be credited with the amount invested; but if we are asked to determine how much a man would have to invest to give him a certain interest in the partnership, say one-fourth, the interest of the other partner or partners would represent three-fourths of the capital of the new partnership; on this basis we determine the new capital and correspondingly the amount the new partner would have to invest to produce the new capital.

Interest on Partners' Capital and Drawings

The charging of interest on investments and drawings has a two-fold purpose:

1. To determine the actual business profits after allowing for a normal return on the investment. In other words, a business is expected first of all to show a legitimate return on the capital invested; all profits realized in excess of the interest return are regarded as the true business profits, or as our friends the economists would say, as the profits arising from entrepreneur ability.

2. To serve as a means of making an equitable adjustment of irregular investments and drawings.

If interest is not allowed on partners' capital, the effect is as follows:

1. If investments are equal and profits are shared unequally, that partner loses who is entitled to the smaller share in the profits.

2. If profits are shared equally, investments being unequal, that partner loses who has the larger investment.

It follows that the only circumstances under which neither would lose would be in case of profits being shared in proportion to investments, with equal drawings made at the same time.

When interest is allowed on each partner's investment, an adjustment entry should be made charging Interest on Partners' Capital and crediting the Capital account, or Drawing account of each partner if a Drawing account is kept.

Interest should be reckoned on the capital at the beginning of the period; any additions to capital made during the year would be entitled to interest for the time it was employed.

Interest should be charged on each drawing from the date the withdrawal was made to the end of the period. An adjusting entry should be made charging the partners' Capital or Drawing account, if one is kept, and crediting Interest on Partners' Capital.

In reckoning interest on capital and drawings, it is customary to use a normal interest rate, commonly five or six per cent.

"The same net result, so far as the partners' balances are concerned, may be secured by crediting or debiting interest on the excess or deficit which each partner's contribution shows in relation to the average capital." Three partners, A, B and C, may have invested \$100,000, \$80,000, and \$60,000 respectively, making a total investment of \$240,000, the average capital being \$80,000. A would be entitled to interest on the amount of his investment in excess of the average, or \$20,000; C would be charged interest on a deficit of \$20,000, while B, having the average amount invested, is neither charged or credited with interest.

Partners' Loan Accounts

If money is advanced by a partner for use in the business, the money thus advanced is regarded as a loan and as such should be credited to a separate loan account and not to the Capital or Drawing account. The reason for this is that a loan has priority over capital in case of liquidation. In other words, in case of a dissolution of the firm, the claims of all trade creditors must first be satisfied, after which a loan made by a partner should be paid together with interest due thereon. Following this, the assets remaining for distribution are divided among the partners in accordance with the balance shown by their Capital accounts.

If interest on a partner's loan is credited to the partner instead of being paid in cash as it comes due, it should be credited to the loan account instead of to the Capital or Drawing account.

Liquidation of a Partnership

The fundamental principles to follow in the liquidation of a partnership is that the net assets remaining after the payment of all debts including partners' loans must be divided on the basis of each partner's net worth at the time of dissolution. Any shrinkage in the liquidation of book assets is a loss which must be borne by each partner in the same proportion in which business profits or losses are shared. The cash or other assets remaining for distribution among the partners will always equal the combined net worth of the partners.

If in the sharing of losses or for any other reason, a partner's capital account should show a debit balance, the cash on hand will be insufficient to liquidate the interests of the other partners to the extent of the debit balance to the partner's account. Such a partner must therefore pay into the firm the amount of his indebtedness and then the accounts of the remaining partners can be closed. If, however, the delinquent partner is insolvent, the amount of his indebtedness is to be regarded by them as an additional loss to be borne in the same proportion in which profits are shared; according to Hatfield this practice seems to be logical and to have the sanction of the court although some authorities state that in such a case, the delinquency of a partner would be borne in proportion to the investment.

Occasionally in the liquidation of a partnership it is desired to distribute the net assets in instalments as quickly as they are converted into cash, and hence before the shrinkage in liquidation can be determined. In such cases, it is essential that the instalments be so distributed that in any contingency no one partner will have received more than his share.

To quote again from Hatfield:

"To take the case of a partnership in which the profits and losses are to be divided as follows: 50% to A, 30% to B, and 20% to C, the Balance Sheet before liquidation being as follows:

BALANCE SHEET OF A, B AND C

Assets	\$25,000	A, Capital Account	\$10,000
Profit and Loss	5,000	B, Capital Account	10,000
		C, Capital Account	10,000
	\$30,000		\$30,000

"The loss is apportioned among the partners in the proper ratio, leaving the claims of A, B and C, \$7,500, \$8,500 and \$9,000 respectively. The assets are gradually converted into cash, the first instalment available for distribution being \$10,000. How shall it be divided? It being impossible to know beforehand, how much the remaining assets will yield, it is necessary to equalize the status of the partners so that if no more cash is received the actual losses will be in the predetermined ratio. If nothing had been realized, the net loss of each of the partners would have been \$7,500, \$8,500 and \$9,000. But if A loses \$7,500, B should, by the partnership agreement, lose only \$4,500 and C only \$3,000. Before paying anything to A, \$4,000 should therefore be paid to B and \$6,000 to C. The proper adjustment having been made, all further instalments are to be divided in proportion to the division of losses; this method of treating all unrealized assets as potential losses prevents any one of the partners being overpaid."

Insurance of a Partner's Life

It is a not uncommon practice for a firm to insure the life of a partner of partners for the benefit of the firm. The death of a partner, particularly if he contributes an unusual type of skill or business ability, would be keenly felt by the surviving partner or partners.

In such cases, the expense of taking out the insurance is borne by the firm just the same as insurance placed on any tangible property of the firm. The premiums paid on such insurance, which is usually either straight life or term life, may be either regarded as an expense or they may be capitalized, the insurance policy being shown among the assets of the firm. While the former is the more conservative practice there is no objection to the latter method. If this method is followed the question arises as to the basis of capitalization. The two methods followed in practice are (a) to capitalize the full amount of annual premiums paid and (b) to capitalize the premiums at the cash surrender value of the policy. If this is done, inasmuch as the usual policy does not have a cash surrender value until after it has been in force three years, it would be necessary to charge the first three premiums to expense; after bringing the first year's cash surrender value on the books as an asset, such a part of each succeeding year's premium would be charged to the asset account as would show the increase in the surrender value from one year to the next, the remainder of the premiums being charged to expense.

In case of the death of the partner, the amount received from the insurance company in payment of the death claim should be credited to the asset account kept; the net proceeds then shown by the account is treated as a profit and is shared by the surviving partner, or partners and by the estate of the deceased partner as profits are shared.

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- P. J. Esquerre, C.P.A., *Applied Theory of Accounts*, Chapter I.
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QUIZ ON THE THEORY OF PARTNERSHIP ACCOUNTS

1. In the absence of any partnership agreement as to the showing of profits, what division of profits would be allowed by the courts?
2. What different methods are there of handling ledger accounts kept with partners?
3. Under what circumstances should a Salary account be kept with each partner? How should the undrawn or overdrawn balance of the account be shown in the Balance Sheet?
4. When would you close the balance of the Drawing account into the Capital account and when carry the balance of the account forward into the next period?
5. What determines at any time the interest of a partner in the firm?
6. What distinction would you make between the division of profits and the share in the partnership assets?

7. State the general principle to be followed in problems relating to the admission of a partner?
8. State the two-fold purpose of reckoning interest on partners' capital and drawings. What entries are made for the interest so reckoned?
9. If the capital accounts of two partners are equal, profits being shared unequally, which partner loses if interest is not allowed on the capital invested?
10. If the capital accounts are unequal, profits being shared equally, which partner would lose?
11. Under what conditions would neither partner gain nor lose if interest is not reckoned on capital?
12. In case of liquidation, what is the status of a loan or advance made to a firm by a partner?
13. If interest on a partner's loan is not paid in cash, to what account should it be credited?
14. What principle governs the division of the net assets of a firm in case of dissolution?
15. How should any shrinkage of partnership assets in liquidation be treated?
16. Suppose in case of dissolution that the account of a partner showed a debit balance.
17. What method should be followed in a dissolution if the liquidation of the firm assets extends over a considerable period and it is desired to distribute the net assets in instalments as quickly as they are converted into cash?
18. Distinguish between one who buys say a third interest in a firm from a partner, and one who invests such an amount as will entitle him to a third interest.
19. A firm is composed of A and B whose capital accounts show credits of \$30,000 and \$50,000 respectively; how much must C invest to give him a one-fifth interest?
20. If the firm insured the life of a partner for the benefit of the firm, what entry would be made for the annual premium? At what valuation would you show the policy among the firm assets? In the event of death, what distribution of the insurance should be made?
21. In case Goodwill is brought on the books of a partnership, in what proportion should it be divided among the partners?

ADVANCED ACCOUNTING PROBLEMS

PART I

PARTNERSHIP ADJUSTMENTS

1. (From New York C. P. A. Examination, June, 1914.)
X and Y bought merchandise to the amount of \$12,000. X contributed \$7,500; Y, \$4,500. They afterwards sold Z a one-third interest for \$6,000. How much of this amount should X and Y receive respectively in order to make X, Y, and Z equal partners?
2. During the summer of 1909, D and S were equal partners in the oriental goods business in Lake Placid, N. Y. At the close of the season after all collections had been made and all debts paid there remained in the bank a balance of \$64.85. Their books of account showed that during the summer D had withdrawn \$219.80 and S \$132. At the close of the season they dissolved partnership but no immediate settlement was made and three months later when they came to settle, D had spent the remaining balance of \$64.85. At that time D entered a claim for personal goods to the amount of \$26 which he had contributed to the firm, and S, a similar claim for \$15.75. S demands a settlement. What amount is owing to him?
3. Smith and Johnson are partners, Smith having invested \$20,000 and Johnson \$9,000, profits and losses shared equally. Upon liquidation losses are suffered so that the amount available for distribution to the partners is only \$10,000.
How should the \$10,000 be divided?
4. X, Y and Z are partners, their capital accounts showing A, \$60,000; B, \$20,000, and C, \$45,000. Upon dissolution the assets of the concern are sold for \$54,700.
 - a. How should the deficit be divided?
 - b. B is insolvent and the claim against him is worthless. How should the amount available for distribution be divided?
 - c. Show the partners' accounts as they would appear after the books had been closed finally.

5. (From Examination for Admittance to the American Institute of Accountants, June, 1917.)

A, B and C were in partnership, A's capital being \$90,000, B's \$50,000, and C's \$50,000. Their agreement is to share profits in the following ratio: A, 60%; B, 15%; C, 25%. During the year C withdrew \$10,000. Net losses on the business during the year were \$15,000, and it is decided to close out the business. It is uncertain how much the assets will ultimately yield, although none of them is known to be bad. The partners therefore mutually agree that as the assets are liquidated, distribution of cash on hand shall be made monthly in such a manner to avoid so far as feasible, the possibility of paying to one partner cash which he might later have to repay to another. Collections are made as follows: May, \$15,000; June, \$13,000; July, \$52,000. After this no more can be collected. Show the partners' accounts, indicating how the cash is distributed in each instalment. The essential feature in the distribution being to observe the agreement given above.

6. (From New York C. P. A. Examination, June, 1917.)

Three partners contribute capital as follows: X, \$90,000; Y, \$45,000, Z, \$15,000. They share profits in the proportion of X, 50%; Y, 30%, and Z, 20%. X's salary is \$5,000, Y's salary is \$3,000, Z's salary is \$2,000. At the end of their fiscal period Z dies. The books are closed and the net assets ascertained to be \$152,500. X and Y liquidate the firm's affairs and distribute the surplus assets quarterly as follows:

First quarter	\$12,410.20	
Second quarter	74,622.30	
Third quarter	31,967.50	\$149,000

Prepare a statement of the partners' accounts, showing how the distribution of assets should be made, together with the apportionment of the loss.

7. (From New York C. P. A. Examination, December, 1898.)

A, B, and C agree to start in business with a capital of \$200,000, of which A is to furnish \$100,000 and B and C, \$50,000 each. A is to have one-half interest in the business and B and C, each one-quarter. Interest at 5% is to be credited on excess, or charged on deficiency of capital. A contributes \$100,000, B, \$45,000, and C, \$40,000. How would the capital accounts stand on the books after adjusting the interest at the end of the year?

8. (From New York C. P. A. Examination, June, 1901.)

For the purpose of making a joint speculation, A contributes \$3,000, B, \$2,000, and C, \$1,000, and they agree to share the profits or loss in proportion to the amounts contributed. October 15, 1900, A deposited the \$6,000 with his broker, giving instructions to buy 300 shares New York Central and 300 shares Chicago, Burlington & Quincy. The order was executed October 16, 1900, N. Y. C. at 130 $\frac{3}{8}$, and C. B. & Q. at 127. April 10, 1901, under instructions from A, N. Y. C. was sold at 151 $\frac{1}{8}$ and C. B. & Q. at 191 $\frac{1}{2}$, a check being received from the broker to close the account. How much does A owe B and C for their interests in the deal, calculating interest at 6% (365 days to the year), commission at $\frac{1}{8}$ %, and revenue tax of \$2 for each 100 shares?

9. (From C. P. A. Examination, New York, June, 1902.)

A, B and C were partners carrying on business with a capital December 31, 1900, of \$60,000, of which A's share was \$30,000; B's, \$20,000; and C's, \$10,000; each partner was entitled to 5% interest on his capital; profits or losses to be shared as follows: A, $\frac{7}{12}$; B, $\frac{1}{4}$; and C, $\frac{1}{6}$. The partners agree, July 1, 1901, to dissolve. After all partnership assets had been realized, and all debts paid except \$500 legal expenses, there remained a balance in bank of \$38,750. Final settlement takes place December 31, 1901. Cash in bank bears interest at 2% from October 1, 1901. Show a statement for settlement and partners' capital accounts as of December 31, 1901.

10. Wilson and Lawson are partners, sharing profits and losses equally. The partnership is dissolved December 31, 1907, at which time Wilson's capital investment was \$10,000, and Lawson's, \$2,500. The total liabilities of the firm are \$25,000, which includes \$5,000 due Wilson on loan account, and \$2,500 due Lawson on loan account. The assets of the firm are disposed of for \$30,000 on May 1, 1908. Prepare accounts closing the partnership and showing the position in which the partners stand to each other. No allowance for interest is required.

11. (From Massachusetts C. P. A. Examination, October, 1914.)

A, B and C engage in business, A contributing \$10,000 and B, \$5,000, while C in lieu of any capital contribution agrees to undertake the active management at a salary of \$3,000 per year, to be paid monthly.

After allowing 5% interest on capital, they are to divide the net result in the proportions of 5, 3 and 2 respectively.

At the end of eighteen months they ascertain the position to be unfavorable and decide to wind up. The assets realize \$12,500; there are no liabilities except for capital and interest thereon and one month's salary due C.

Make up the partners' accounts, showing the amount to be received by each.

12. (From Massachusetts C. P. A. Examination, June, 1912.)

A and B form a partnership, A investing \$30,000 and B, \$50,000. They agree to share expenses, profits and losses equally. They further agree to and do leave their original investments intact. At the end of the first year, the profits from the operations of the business amount to \$30,000, against which A has drawn in twelve equal monthly instalments on the last day of each month an aggregate amount of \$9,000. B has drawn against his profits on the last day of each quarter the sum of \$2,500.

Prepare journal entries adjusting interest at 5% per annum between the partners in respect to both their investment and drawing accounts, and render statements showing the amount each partner has in the business at the end of the year.

13. (From Illinois C. P. A. Examination, May, 1914.)

A and B enter into a partnership and will share profits in the proportions indicated by their investments. A furnishes \$25,000 and B, \$15,000, which is invested in lands and buildings, \$10,000 and merchandise, \$30,000. However, before they have actually commenced business, C realizing that A and B have a promising venture, offers to buy a one-third interest in the business for \$20,000. A agrees to sell provided B will consent to pay him a bonus of \$4,000 out of his (B's) share. This B agrees to do and consent to the sale.

How should the \$20,000 be divided between A and B so that the interest of all three partners will be equal?

14. (From Virginia C. P. A. Examination, November, 1910.)

Smith, Hill and Davis engage in business under an agreement that Smith is to have a salary of \$200; Hill, \$150; and Davis \$100 per month, respectively; that the earnings are to be determined at any time at the request of any partner and the profits divided on a basis of the amount of business secured by each. They are in business nine months and find their accounts as follows:

Smith's business	\$4,500.00
Hill's business	2,800.00
Davis' business	3,000.00
Net profits	2,100.00

They then decide to rescind the salary agreement and divide the profits shown on a basis of business secured individually, treating the salary drawn as an advance.

You find errors during the nine months' period, namely:

Office furniture, charged to operation	\$65.00
Accounts receivable, Smith's business, uncollectable	210.00
Funds advanced by Davis, credited to his earning account	400.00

Items not yet paid nor entered into accounts:

Smith's salary	\$200.00
Hill's salary	150.00
Advertising	27.50
Clerk Hire	130.00
Telephone	6.00
Rent	50.00
Stationery expenses	15.00

Show the journal entries necessary to readjust the accounts; make a statement of the profit and loss account, showing all corrections and showing each man's share in the net profits.

15. (From New York C. P. A. Examination, June, 1909.)

A, B, and C and D, partners sharing profits equally, decide to dissolve partnership and on December 31, 1908, appoint a liquidator and transfer all assets to him. He is to receive for his services 5% of the cash

collected by him in the liquidation of the assets. The liquidator is also to be allowed the expenses paid by him in the liquidation of the business as follows:

Clerk hire	\$1,000.00
Rent	500.00
Miscellaneous expenses	700.00

All the debts of the firm were paid and all the notes and the accounts were collected excepting \$3,200 of worthless and uncollectable accounts. The furniture and fixtures brought \$2,800 and the merchandise was sold for \$18,000 cash. The balance payable to partners was distributed on December 31, 1908. No interest is to be figured on the partners' accounts or on the moneys in possession of the liquidator.

Prepare cash account of liquidator, statement showing expenses and losses in liquidation and statement of the partners' accounts. The balance sheet of the firm on December 31, 1908, was as follows:

	Debits	Credits
Furniture and fixtures.....	\$3,500	
Merchandise inventory	20,500	
Notes receivable	14,000	
Accounts receivable	38,000	
Unearned insurance premium expiring during 1908.....	800	
Cash	7,500	
Notes payable		\$5,000
Accounts payable		38,740
Accrued interest on notes payable.....		80
Accrued taxes		480
A's account		16,000
B's account		8,000
C's account		10,000
D's account		6,000
Totals	\$84,300	\$84,300

16. (From New York C. P. A. Examination, June, 1906.)

Blackman & Co. of New York agree with Whittaker & Co. to ship on joint account a carload of goods on consignment to Seattle. The invoice price of the goods is \$4,000 less 5%. Blackman & Co. pay the hauling, insurance and freight charges amounting to \$200 and give to Whittaker & Co., March 1, 1905, a sight draft on the consignees for \$2,000 as part payment for the goods. On May 1, 1905, Blackman & Co. receive an account sales from the consignees and their check for \$6,000 as the net proceeds of the consignment. They then pay Whittaker & Co. the balance due them. Interest is calculated at 6%.

Prepare joint consignment account and the account to be rendered by Blackman & Co. to Whittaker & Co.

17. (From Washington C. P. A. Examination June, 1906.)

X and Y enter into partnership, X's capital being \$20,000 and Y's \$15,000. Capital is to bear interest at 10% per annum; profits are to be divided equally between the partners. The profits for the first two years, after charging interest on capital, were:

1st year	\$6,000
2nd year	7,500

and the drawings of the partners in excess of salaries were:

X	\$1,500 first year—\$1,750 second year
Y	1,200 first year— 1,500 second year

At the end of the second year, Z is admitted into partnership, who puts into the business the same amount of capital as Y had in at that time and on the same conditions as to interest and division of profits. The profits of the business for the third year were \$12,000 and the partners' drawings in excess of salaries were:

X—\$1,750	Y—\$1,600	Z—\$1,500
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Construct the capital accounts of the partners for each of the three years, showing the balance of each at the end of the third year.

18.

TRIAL BALANCE OF A, B & C, JUNE 30, 1913.

	Debits	Credits
Cash	\$8,000.00	
Profit and Loss	6,000.00	
Accounts Payable		\$2,000.00
A's Loan Account		3,000.00
A's Capital Account		3,000.00
B's Capital Account		5,000.00
C's Capital Account		1,000.00
	<u>\$14,000.00</u>	<u>\$14,000.00</u>

a. Assuming that there is no partnership agreement, and that C is unable to make good his deficiency, show how you would dispose of the above cash balance. Set up ledger accounts for the above items and show the cash book and journal entries required for winding up the affairs of the partnership in conformity with the common law.

b. Assuming that later on C came into possession of property and offered to pay A and B the amount of deficiency standing to the debit of his account at the time the partnership was dissolved, and that they accepted such amount in full settlement of their claim against him, how should the amount paid by him be divided between A and B?

c. Had their ledger accounts shown the following balances how would you have distributed the loss and residue?

	Debits	Credits
Cash	\$6,000.00	
Profit and Loss	9,000.00	
A's Loan		\$5,000.00
A's Capital Account		2,000.00
B's Capital Account		7,000.00
C's Capital Account		1,000.00
	<u>\$15,000.00</u>	<u>\$15,000.00</u>

19. (From Wisconsin C. P. A. Examination, April, 1914.)

January 1, 1913, A and B signed articles of copartnership to engage in a mercantile business, agreeing to invest \$15,000 and \$25,000 respectively. Profits were to be divided in proportion to capital contributed, and interest at 5% was to be allowed on investments in excess of the agreed contributions and was to be charged on deficits under the agreed contributions.

The trial balance of their books on December 31, 1913, was as follows:

Purchases	\$60,000.00	
Office Expense	1,000.00	
Real Estate	5,000.00	
Building	10,000.00	
Accounts Receivable	12,000.00	
Cash on Hand	1,000.00	
Notes Receivable	8,000.00	
Furniture and Furnishings	2,000.00	
Discounts Earned		\$1,000.00
Accounts Payable		7,000.00
Salaries and Wages	4,000.00	
Notes Payable		4,000.00
Sales		55,000.00
A		9,000.00
B		27,000.00

The merchandise on hand is valued at \$10,000.

After allowing for interest on investments, divide the net profits according to the agreement. Give the capital accounts of each partner and the balance sheet as of January 1, 1914.

On this date a third party, C, desired to enter the partnership, and it was agreed:

a. That C pay \$9,000 in cash for a one-fourth ($\frac{1}{4}$) interest in the new concern.

- b. That good will of A and B be valued at \$3,000.
- c. That A and B adjust their capitals, so that they hold a one-fourth ($\frac{1}{4}$) and one-half ($\frac{1}{2}$) interest respectively in the new firm.
- d. That profits and losses are to be divided according to capital contributions.

In the adjustment, A received cash (out of the \$9,000 paid in by C) for his excess investment, while B received the remainder of the \$9,000 paid in by C, and the balance due him was considered a loan to the partnership.

Give journal entries necessary to record the above facts and the opening balance sheet of the new firm.

April 1, 1914, A, B, and C agreed to sell the business. Up to this time each partner had withdrawn \$500. The assets were disposed of for \$24,500 cash, and the vendee assumed the liabilities of the partnership.

How should this sum of \$24,500 be divided among the partners? Show the exact relation of the partners to one another by accounts or statements.

20. (From New York C. P. A. Examination, January, 1915.)

The firm of A & B began business on January 1, 1912, the terms of the partnership contracts specifying that no interest was to be credited on investments or charged on withdrawals, and all profits or losses were to be shared equally. A invested \$24,000 and B \$15,000.

On November 30, 1914, the partnership was dissolved, and as the books had not been properly kept, the following statement was submitted to the partners as a basis for settlement, and agreed to by them: cash, \$14,200; net debit of A, \$6,300; expenses, \$15,300; net credit of B, \$10,500; profit and loss, debit, \$9,000; credit, \$1,500; real estate having an estimated market value of \$3,300; the bank holds firm's six months' 6% note for \$10,000, due January 31, 1915, on which interest is unpaid.

B liquidated the assets and liabilities and in due course sold the real estate for \$4,000 and paid off the note when due.

Prepare the partners' accounts as of November 30, 1914 and as of the close of liquidation, and a balance sheet as of November 30, 1914.

21. (From California C. P. A. Examination.)

Brown, Green, Black and White form a partnership on June 1, 1903. Capital is contributed by Brown, \$20,000; Green, \$18,000; Black, \$12,500; and White, \$9,500. The profits and losses are to be divided in the ratio of these contributions. On May 31, 1904, the Trial Balance shows as follows:

Brown, Capital	\$20,000.00	
Green, Capital	18,000.00	
Black, Capital	12,500.00	
White, Capital	9,500.00	
Cash	\$3,480.28	
Merchandise	52,190.05	
Fixtures	2,940.00	
Accounts Receivable	24,082.75	
Patent Rights	2,000.00	
Real Estate	9,000.00	
Accounts Payable		16,308.64
Demand Notes Payable.....		25,000.00
Mortgage Note (on the Real Estate).....		4,000.00
Wages and Salaries.....	4,560.00	
Discount on Sales.....	1,240.00	
Discount on Purchases.....		1,392.80
General Expenses.....	3,800.44	
Commission		2,755.40
Interest	792.00	
Brown, Personal Drawings.....	1,980.00	
Green, Personal Drawings.....	1,242.00	
Black, Personal Drawings.....	2,148.50	
	<hr/>	<hr/>
	\$109,456.84	\$109,456.84

Merchandise account represents Purchases of \$142,784.30; Sales, \$89,542.28; Rebates on Purchases, \$2,472.10, and Allowances to Customers, \$1,420.13. Inventory Value May 31, 1904, is \$73,669.37. Office rent, \$100, has been paid in advance for June, 1904. Unexpired insurance premiums amount to \$74.00. Accrued interest on Demand Notes to May 31, 1904, is \$375.00. It is agreed that depreciation of 25 per cent. on Fixtures shall be charged, that valuation of Patent Right shall be increased to \$3,000.00, that a Reserve Fund of 2½ per cent. of the Accounts Receivable shall be created to provide for loss in collection, that interest shall be allowed to all partners on Capital Accounts at 3 per cent. per annum, and that a salary shall be allowed to White of \$1,200.00.

Prepare a Profit and Loss Account, and Balance Sheet as of May 31, 1904. Present the Operating Statements in all detail possible with the information at hand, and show the percentage of Gain or Loss per Trading Account, and of Gain or Loss per Profit and Loss Account on the basis of the cost of the Merchandise sold.

22. (From Illinois C. P. A. Examination, May, 1913.)

A and B, equal partners in a manufacturing business, admit their factory superintendent, C, as an equal partner with them in the profits without his furnishing any capital, A and B reserving to themselves in case of dissolution any good will which may have accrued to the business.

On December 31, 1912, a balance sheet was drafted and approved by all concerned as follows:

Assets:

Real Estate and Plant.....	\$90,000.00
Merchandise Inventory	35,000.00
Accounts Receivable	25,000.00
Notes Receivable	15,000.00
Cash	18,000.00
	<hr/>
	\$183,000.00

Liabilities:

Notes Payable	\$10,000.00
Accounts Payable	12,500.00
A's Account	\$4,500.00
B's Account	4,000.00
C's Account	2,000.00
	<hr/>
	10,500.00

Capital Accounts:

A	\$75,000.00
B	75,000.00
	<hr/>
	150,000.00
	<hr/>
	\$183,000.00

Later the business was sold as a "going" concern and the partnership dissolved. The purchaser assumes all outside liabilities and pays the sum of \$225,000 cash, of which the real estate and plant is valued at \$120,000. Make the entries necessary to close the books of the partnership, and show the condition of the partners' accounts after closing.

23. (From examination for Admittance to the American Institute of Accountants, June, 1917.)

A, B and C formed a partnership. A agreed to furnish \$10,000, B and C each \$7,000. A was to manage the business and receive one-half of the profits; B and C were each to receive one-fourth. A supplied merchandise worth \$8,500, but no additional cash. B turned over to A, as managing partner, \$9,000 cash, and C turned over \$5,500. The business was conducted by A for some time, but without keeping exact books. While managing the business A purchased additional merchandise amounting altogether to \$75,000 and made sales of \$100,000. The cash received and paid out for the partnership was not kept separate from A's personal cash. In order to straighten out matters, B took over the management. He found receivables amounting to \$20,000, and of these he collected \$4,500. The merchandise still on hand he sold for \$500. These receipts he deposited in a bank to the credit of the firm. The remaining accounts proved worthless. The outstanding accounts payable amounted to \$2,000, of which \$1,500 had been incurred in purchasing merchandise and \$500 for expenses. These accounts he paid. A presented vouchers showing that during his management he had paid other expenses of \$2,400. By mutual agreement B was held to be entitled to \$100 on account of interest on excess capital contributed and A and C were to be charged \$75.00 each for shortage in contribution of capital.

- a. Prepare trading and profit and loss accounts and accounts of each of the partners, indicating the final adjustment to be made in closing up the partnership.
- b. Show how the above final adjustment would be modified if A proved to have no assets or liabilities outside the partnership.

24. (From Massachusetts C. P. A. Examination, October, 1916.)

Fish and Driscoll were partners in a manufacturing business sharing profits equally. Driscoll was the financial man having charge of the books and accounts. Fish was the practical man. On January 1, 1909, Driscoll retired from the concern. The capital accounts of the two partners on that date showed Fish \$15,000 and Driscoll \$16,000. Fish agreed to pay Driscoll for his interest in the business the sum of \$20,000. Of this amount \$5,000 was paid in Cash (from the funds of the firm) and for the remainder Driscoll accepted Fish's note, which was secured by a mortgage on his house. Because of Fish's lack of knowledge regarding accounts, the cash payment only appeared on his books.

Fish conducted the business himself for the next five years. The profit and loss account on his books showed profits for those five years to have been \$5,000, \$5,300, \$6,750, \$8,500 and \$10,600. Fish had withdrawn from the business over and above his salary \$16,250.

Fish then desired to enlarge his plant and arranged for Smith to buy a half interest. They agreed that the good will was worth three times the average profits for the last five years as shown by the books. Smith was to obtain his half interest in the business and good will by investing cash equal to the capital account of Fish on January 1, 1914. Also cash equal to half the good will. It was agreed to place the full value of good will upon the books. Fish had purchased machinery for plant during the five years as follows: \$3,000; \$3,500; \$4,000; \$4,500; and \$5,000 respectively.

Fish's bookkeeper on January 1, 1914, made up the following statement:

Cash	\$150.00	Accounts and Notes Payable.....	\$30,000.00
Machinery	45,000.00		
Accounts Rec.	14,000.00		
Inventories of Raw and Finished Product	16,750.00		

At the end of the year 1914 the partners had their accounts examined by an accountant, who found that no depreciation had been allowed by Fish during the five years that he was conducting the business alone, that no entry had been made for the note given to Driscoll and that the balance of Driscoll's account after the cash payment had been charged to it had been transferred to his (Fish's) account. Both partners (Fish and Smith) were fairminded and neither desired to obtain an advantage over the other. They agreed that depreciation from January 1, 1909, to January 1, 1914, at the rate of 10 per cent. a year on the reducing basis be allowed in determining the annual profit, but in view of rising machinery prices the machinery should be carried on the books of the new company at cost to Fish; and that Driscoll's note be entered, and that the partner having the lesser capital after this adjustment had been made should contribute cash to bring his capital up to the amount of the other partner and allow the other partner interest at 6 per cent. on this amount for the year 1914.

- a. Show the entries necessary to give effect to the wishes of the partners;
- b. State the amount necessary to be contributed and make a balance sheet after the necessary entries had been made.

25. (From Ohio C. P. A. Examination, November, 1916.)

A and B have been partners for ten years with respective interests of two-thirds and one-third in all particulars. A desiring to retire from the partnership, B and C agree to purchase A's interest. As a basis of settlement the following Trial Balance is submitted:

TRIAL BALANCE OF A AND B AT DECEMBER 31, 1915.

Cash	\$27,720.83	
Accounts Receivable	104,123.17	
Raw Material Jan. 1.....	92,600.00	
Finished Goods Jan. 1.....	67,500.00	
Raw Material Purchased.....	156,500.00	
Supplies Jan. 1.....	5,000.00	
Supplies Purchased	7,000.00	
Labor	163,000.00	
Superintendence, etc.	6,000.00	
Power, Heat and Light.....	13,000.00	
Taxes, Insurance, etc.....	12,500.00	
Land	25,000.00	
Buildings	75,000.00	
Machinery	50,000.00	
Selling Expense	75,000.00	
General Expenses	30,000.00	
Accounts Payable		\$127,944.00
Sales (Net)		500,000.00
A's Capital		200,000.00
B's Capital		100,000.00
A's Drawing Account.....	12,000.00	
B's Drawing Account.....	6,000.00	
	<hr/>	<hr/>
	\$927,944.00	\$927,944.00

In determining A's interest the following data is to be taken into consideration:

a. During the term of the partnership of A and B, no allowance was made for depreciation of Buildings or Machinery; nor was any reserve set up for bad debts, the custom having been to charge off accounts only when known to be worthless. It is agreed to depreciate the Buildings for 10 years at 2 per cent. on decreasing values; and to depreciate \$30,000 of Machinery for 10 years and \$20,000 for 3 years at 10 per cent. on decreasing values.

b. It is further agreed between all parties that the assets and liabilities shall consist of

Assets:

Cash as shown on Trial Balance
Land at book value
Buildings and Machinery at book values, less depreciation

Accounts Receivable as shown on Trial Balance, except that \$2,000 is to be deducted for doubtful accounts

Raw Materials, as per inventory.....	\$100,000.00
Finished Goods, " " "	75,000.00
Supplies " " "	6,500.00
Prep'd Insurance, " " "	3,000.00

Liabilities:

Accounts Payable as shown on Trial Balance	
Accrued Taxes	2,500.00
Accrued Wages	7,500.00

c. The good will is to be taken as equal to the net earnings for the last three years, after taking into consideration the depreciation on Buildings and Machinery pertaining to these years, and the allowance of \$2,000 during 1915 for doubtful accounts. The profits shown by the books were \$30,450.19 for the year 1913, and \$38,287.31 for the year 1914.

From the given data prepare the following :

1. A statement of the profits and loss for the year 1915 regardless of depreciation ; then add the good will, deduct the depreciation of Buildings and Machinery for the whole time and show the remainder that is to be carried to the Balance Sheet.
2. A Balance Sheet after making all adjustments and taking into consideration good will and depreciations. Show on this statement the Net Worth as a whole and A and B's respective interests.
3. Statement showing how you arrive at the valuation of the good will.
4. On the assumption that B and C are to be equal partners in all respects, state the amount of cash that each would have to contribute towards the purchase of A's interest, after turning over all of the old partnership to A in part payment.

PART II

CORPORATION ACCOUNTS

CLOSING ENTRIES FOR PARTNERSHIP BOOKS AND OPENING ENTRIES FOR CORPORATION BOOKS

To illustrate the form of entries to be made in closing a set of partnership books and in opening a set of corporation books the following proposition is submitted:

Hall, Ball & Co., a partnership conducting a wholesale business and showing profits in proportion to investments, concludes to incorporate. The following balance sheet was prepared as of December 31, 1915, the day on which the corporation is to succeed to the business

BALANCE SHEET, DECEMBER 1, 1915

Cash	\$5,000	Accounts Payable	\$25,000
Accounts Receivable	30,000	Notes Payable	5,000
Inventory	120,000	Hall—Capital	60,000
Sundry Assets	25,000	Ball—Capital	60,000
		Clark—Capital	30,000
	<hr/>		<hr/>
	\$180,000		\$180,000

They incorporate the Hall-Ball Company with an authorized capital of \$175,000, all the stock to be issued to the three partners in exchange for their respective interests in the business.

Closing entries for the partnership books and opening entries for the corporation are required:

Entries to Close Partnership Books

(a)

Good will	\$25,000
Hall—Capital	\$10,000
Ball—Capital	10,000
Clark—Capital	5,000

To bring good will on the partnership books, its value being determined by the excess of the capital stock to be issued to the partners over the net worth of their business as shown by the balance sheet prepared Dec. 1. Good will is divided among them in the proportion in which they share profits.

(b)

The Hall-Ball Company.....	\$205,000
Cash	\$5,000
Accounts Receivable	30,000
Inventory	120,000
Sundry Assets	25,000
Good will	25,000

To close the accounts with the assets taken over by The Hall-Ball Company.

(c)

Accounts Payable	\$25,000
Notes Payable	5,000
The Hall-Ball Company.....	\$30,000

To close the accounts with the liabilities assumed by The Hall-Ball Co.

(d)

Capital Stock (Hall-Ball Co.).....	\$175,000
The Hall-Ball Company.....	\$175,000

To bring on the books the 1,750 shares of stock received from The Hall-Ball Co. in exchange for the partnership business.

(e)

Hall—Capital	\$70,000
Ball—Capital	70,000
Clark—Capital	35,000
Capital Stock	\$175,000

To show the issue to the individual partners of the capital stock of The Hall-Ball Co., thus closing all accounts on the partnership books.

Entries to Open Corporation Books

December 1, 1915

The Hall-Ball Company
Has Been Incorporated This Day
Under the Laws of the
Commonwealth of Massachusetts
With an Authorized Capital Stock of
One Hundred Seventy-five Thousand
Divided Into
Seventeen Hundred Fifty Shares
of a
Par Value of One Hundred Dollars

Cash	\$5,000
Accounts Receivable	30,000
Inventory	120,000
Sundry Assets.	25,000
Good will	25,000
Hall, Ball & Co.....	\$205,000

To bring on the books the assets acquired from Hall, Ball & Co.

Hall, Ball & Co.....	\$30,000
Accounts Payable	\$25,000
Notes Payable	5,000

To bring on the books the liabilities of Hall, Ball & Co. assumed by the new corporation.

Hall, Ball & Co.....	\$175,000
Capital Stock	\$175,000

To show the issue to Hall, Ball & Co. of 1,750 shares of stock in exchange for the business formerly conducted by them as a partnership.

COMMENTS

In the organization of a corporation to take over a business formerly conducted as a partnership or by a sole proprietor, the cash of the old business as a rule is not taken over by the new company.

The above entries are made on the assumption that the partnership books are to be discarded and a new set of books opened for the corporation. When the partners in a business become the principal or only stockholders in a new corporation formed to take over the business, as in the above case, it is not necessary to open a new set of books. An entry could be made bringing on the books only the new accounts and closing out the capital accounts of the partners.

In the above problem if the accounts were to be continued in the same books, the only entries necessary would be as follows:

Goodwill	\$25,000	
Hall—Capital		\$10,000
Ball—Capital		10,000
Clark—Capital		5,000

(Explanation)

Hall—Capital	70,000	
Ball—Capital	70,000	
Clark—Capital	35,000	
Capital Stock		175,000

(Explanation)

Assume that the capital accounts of each partner showed the following balances after the distribution of the Goodwill:

Hall, \$61,475 Ball, \$58,730 Clark, \$29,795

What change would be made in closing entry (e)?

26. (From Boston High School Examination for Commercial Teachers, 1911.)

Shaw & Co., a partnership conducting a manufacturing business, conclude to incorporate. The firm has the following assets and liabilities:

Cash	\$5,000	Accounts Payable	\$20,000
Accounts Receivable	30,000	Shaw, capital	45,000
Plant and Sundry Assets.....	165,000	Maco, capital	45,000
		Laird, capital	45,000
		Paige, capital	45,000
	<u>\$200,000</u>		<u>\$200,000</u>

They incorporate the Shaw Manufacturing Co. with an authorized capital of \$200,000, divided into 1,000 shares of 7 per cent. preferred stock and 1,000 shares of common stock, both classes of stock at \$100 par value. Each partner is to receive \$25,000 of the preferred stock and \$20,000 of the common stock for his share in the business. The remainder of the stock is to be held for sale.

Make journal entries for the following:

The partnership books are to be closed.

The corporation books are to be opened.

Each of the four shareholders donates to the corporation \$5,000 of common stock to be sold at such price as will produce immediate cash capital.

Sold the donated stock at 95, for half cash and half note.

Sold for cash 50 shares common stock at 105.

The net profits for the year were \$17,000.

A dividend was declared on the preferred stock and a dividend of 6 per cent. was declared on the shares of common stock outstanding.

At the end of the second year all stock had been sold. The net profits were \$11,000. To declare the preferred dividend, and a dividend of 6 per cent. on the common stock, it became necessary to apply profits earned during the preceding year.

A bond issue of \$50,000 was authorized. At the end of three months 10,000 of the bonds were sold at 101 and accrued interest amounting to \$125.

Three months later \$10,000 of bonds were sold at 98 and accrued interest, \$250. At the end of the year bond interest was paid, \$1,000.

\$2,498.75 was set aside as the first instalment of the sinking fund.

27. George N. Brown is an inventor and holds patent rights, processes and inventions which are used by different companies in the manufacture of gas and electric engines and electrical appliances. He decides to organize a corporation for the purpose of selling gas and electric engines, pumps, irrigation machinery

and a full line of electrical appliances. A central jobbing house is to be established in Boston and selling agencies will gradually be opened in all the principal cities.

The corporation is organized under the laws of the state of Maine, March 1, 1913, the incorporators being George N. Brown and three of his business associates. The corporation name is The George N. Brown Company. The authorized capitalization is \$100,000, divided into 500 shares of 7 per cent. non-cumulative Preferred Stock, par value \$100 per share, and 500 shares of Common Stock, par value \$100 per share. In order that the four incorporators may qualify as directors, each is given two shares of Common Stock. Brown assigns to the corporation all of his patent rights and trade marks in exchange for 100 shares of Preferred and 492 shares of Common Stock. He at once donates to the corporation all of his Preferred Stock and 242 shares of his Common Stock to be sold to procure working capital. He also assigns to each of the other three incorporators for a private consideration one-fourth of the remainder of his holding of Common Stock.

King & Co., stock brokers, are engaged to sell the Preferred and Common Stock held in the treasury, their commission to be paid in treasury stock. They sell to John White 50 shares of Preferred Stock, taking in payment two notes, one for \$3,000 and the other for \$2,000, each for 3 months and bearing interest at 5 per cent. The \$2,000 note is immediately discounted at the bank at 6 per cent. For making this sale, King & Co. are given 25 shares of Preferred and 75 shares of Common Stock.

Brown is elected general manager of the company at a salary of \$2,000 per year and travelling expenses. The payments made during the month of March are as follows: Office Furniture, \$200; Office Rent, \$50; Brown's salary for the month; organization expenses amounting to \$250; this included lawyer's fee, stenographer's service, publicity state corporation fee, corporation seal, accountant fee, corporation books of account, etc.

Make journal entries covering the above transactions, post and take a trial balance.

28. (From New York C. P. A. Examination, June, 1910.)

The Patent Specialty Company was organized July 1, 1907, with a capital of \$100,000, to manufacture novelties. The following transactions occurred:

July 1, 1907, one-half of capital stock was subscribed and issued, 10 per cent. being called and paid on that date in cash. Legal and other incorporation expenses, amounting to \$500, were paid.

August 20, 1907, patent, covering novelty, was purchased for \$50,000, payable one-half in stock and one-half in cash; the stock was issued and delivered, \$2,000 paid in cash and note given for balance, due in one month, 6 per cent. interest. The patent was subject to royalty rights granted to the Novelty Company, which terminated at date of purchase. All accrued royalties were to pass with patent and no royalty rights were granted by the Patent Specialty Company.

August 27, 1907, the Village Board of Trade donated a lot, valued at \$5,000, in consideration of agreement to erect and equip a plant at cost of not less than \$25,000.

September 13, 1907, a further call of 70 per cent. was paid. The note was paid at maturity.

December 31, 1907, the following facts existed:

Payments on account of salaries, interest, insurance, etc., amounted to \$2,250, with \$250 accrued; contracts for construction and equipment amounting to \$35,000 had been given which were 75 per cent. completed and 40 per cent. paid; royalties amounting to \$2,725 had been received and \$190 was accrued.

Prepare journal entries to cover foregoing and statement to display financial condition at December 31, 1907.

29. (From Michigan C. P. A. Examination, June, 1908.)

The Western Grain Co. has this day been incorporated under the laws of this State by the following incorporators: C. H. Benton, J. W. Walters, F. Rowland and A. B. Miller, all of this city, with an authorized capital of \$25,000, into 250 shares of \$100 each.

The purpose of this corporation is to buy and sell all kinds of grain, and the subscriptions to the stock of the Company are as follows:

C. H. Benton, 60 shares; J. W. Walters, 60 shares; F. Rowland, 100 shares, and A. B. Miller, 30 shares.

Pursuant to an agreement between the firms of Benton and Walters and F. Rowland, and the Western Grain Co., the former two individual concerns agree to sell to the latter all their assets, consisting of stock of Merchandise, Real Estate, Accounts and Notes Receivable, Goodwill, etc., in consideration of the assumption by the Western Grain Co., of all the liabilities of the two individual concerns as well as for the payment in capital stock of the Company for the balance which the assets may exceed the liabilities. The balance sheet of each individual concern, given below, is taken as exhibiting the exact value of each plant.

The Goodwill of Benton and Walters is valued at \$1,500, while that of F. Rowland is valued at \$2,000.

To enable the corporation to carry out this agreement the original Subscriptions of Benton, Walters and Rowland are therefor amended as follows:

C. H. Benton subscribing 20 shares, Walters 20 shares and Rowland 27 shares. A. B. Miller pays in cash for his subscription and Benton, Walters and Rowland donate each 5 shares of the capital stock of the Company to provide a reserve for contingencies.

Draft the necessary journal entries for the opening of the corporation books and all the other facts mentioned above, and prepare a Balance Sheet.

BENTON AND WALTER'S BALANCE SHEET

ASSETS		
Cash		\$2,300.00
Notes Receivable	\$2,300.00	
Accounts Receivable	8,600.00	
	<hr/>	10,900.00
Furniture and Fixtures.....		200.00
Unexpired Insurance		68.75
Merchandise (Inventory)		931.25
		<hr/>
		\$14,400.00

LIABILITIES		
Notes Payable	\$4,160.33	
Accounts Payable	839.67	
	<hr/>	\$5,000.00
Notes Receivable Discounted.....		1,300.00
C. H. Benton C/A.....		4,000.00
J. W. Walters C/A.....		4,100.00
		<hr/>
		\$14,400.00
		6300
		8100.00

F. ROWLAND'S BALANCE SHEET

ASSETS		
Real Estate		\$5,159.00
Furniture and Fixtures.....		495.00
Merchandise (Inventory)		1,196.00
Notes Receivable	\$800.00	
Accounts Receivable	1,350.00	
	<hr/>	2,150.00
Cash		3,200.00
		<hr/>
		\$12,200.00

LIABILITIES		
Notes Payable	\$1,250.00	
Accounts Payable	1,750.00	
	<hr/>	\$3,000.00
F. Rowland C/A.....		9,200.00
		<hr/>
		\$12,200.00
		3000
		9200

30. (From New York C. P. A. Examination, January, 1902.)

Charles and Robert Wilson are copartners in a manufacturing business, trading under the firm name of Wilson Bros. Following is a statement of the firm's financial condition December 31, 1900:

Real estate and buildings.....	\$165,000	Notes payable	\$4,000	
Machinery and fixtures.....	39,000		2,000	
Horses, trucks and harness.....	4,500			\$6,000
Patents	1,500	Accounts payable	10,000	
Stocks and materials.....	20,000		10,000	
Notes and loans receivable.....	5,000		10,000	
Accounts receivable	15,000		4,000	
				34,000
	<u>\$250,000</u>	Chas. Wilson (capital).....		150,000
		Robert Wilson (capital).....		60,000
				<u>\$250,000</u>

A joint stock company under the corporate title of Wilson & Wilson, incorporated, is organized with a capital of \$300,000, of which \$60,000 is 8 per cent. cumulative preferred stock and \$240,000 common stock (both \$100 par value) to acquire and conduct the business of Wilson Bros. Charles and Robert Wilson and Henry Miller each subscribe for \$10,000 of common stock. The company votes to acquire the interest of Charles and Robert Wilson in the business, real estate, plant, outstanding accounts, etc., of Wilson Bros. and to assume the firm's indebtedness of \$40,000, in consideration of the sum of \$210,000, and to pay therefor 2,100 shares of the common stock of the corporation, 1,500 shares to be issued in the name of Charles Wilson and 600 shares in the name of Robert Wilson. The company votes to place a mortgage on its real estate and plant for \$50,000 to secure an issue of \$50,000 first mortgage 5 per cent. gold bonds of the denomination of \$1,000 each. The creditors subscribe for preferred stock to the amount of 50 per cent. of the amounts due to them and take bonds at par for the remainder.

Make all entries for the foregoing transactions in the order of their occurrence, and prepare a Balance Sheet.

31. The X Company is incorporated under the Business Corporation Law of Massachusetts, January 1, 1916, with an authorized capital of \$100,000. One share of stock is given to each of the three incorporators, A, B and C, in order that they may qualify as directors; five shares are given to a lawyer, D, as compensation for legal services performed in organizing the corporation; an investment banker undertakes the sale of the remainder of the stock to investors less fifty shares of stock, which he is to receive as compensation for his services. The subscription books remain open until March 1. Payments for the stock are to be made in four equal instalments on the first day of March, June, September and December.

On March 1 the banker reports that all the stock is subscribed for and the first instalment is called and paid. Fifty shares of stock are issued to the banker for his services. Stock certificates are issued to all subscribers.

June 1, the second instalment is called and paid.

September 1, the third instalment is called and paid by all subscribers except F, who subscribed for 10 shares.

December 1, the fourth and last instalment is called and paid, F again defaulting on the payment of his instalment.

January 10, 1907, the treasurer of the X Company offers F's shares for sale at public auction. The shares are sold to G for \$700. The expenses of the sale amount to \$25. A stock certificate for the ten shares is issued to G. After deducting expenses and interest on unpaid instalments at 6 per cent. the surplus of the sale is remitted to F upon the surrender of his certificate.

a. Make necessary entries covering the above.

b. In case \$400 is the highest bid at auction for the shares what action would the directors take?

c. Instead of offering F's shares for sale at auction, the directors elected to bring action at law against him for the amount due from him, together with interest thereon. The action is entered on February 1, 1917, for \$535 covering interest and charges. Judgment is obtained on March 1. At the end of thirty days as the judgment remains unpaid, the directors declare all amounts previously paid by him forfeited to the corporation, an entry of transfer of the stock to the corporation is made, and the original certificate is declared void.

Make necessary entries.

PART III

MERGERS, REORGANIZATIONS, HOLDING COMPANIES AND CONSOLIDATIONS

A *Merger* is an absorption of one company by another. In such a case, the company absorbed loses its identity completely and ceases to exist; the absorbing company succeeds to its assets, assumes its liabilities and liquidates the interests of its stockholders, or brings them in as stockholders of the absorbing company on some equitable basis.

An *Amalgamation* is a fusion of two corporations into a new corporation. In such a case both companies which are amalgamated are dissolved and the new company succeeds to the assets and assumes the liabilities.

"A *Reorganization* is a form of financial readjustment adopted in the presence of real or threatened financial trouble, in order that the business of the corporation may be continued under more favorable conditions. It follows a crisis of some kind. It always involves a conspicuous readjustment of the capital liabilities, ordinarily accompanied by a reduction in fixed charges and by the addition of new capital."
—*Dewing*.

A *Holding Company* is a corporation organized for the purpose of acquiring and holding all or a portion of the capital stock of another corporation or corporations. The object to be accomplished is the alliance of independent corporations in such a manner that the financial and commercial policy of the allied companies may be definitely controlled.

The controlled company is spoken of as the **SUBSIDIARY** company; the controlling company as the **HOLDING** or **PARENT** company.

A *Consolidated Balance Sheet* is a balance sheet which represents the true financial condition of related companies regarded as a unit and submitted for the information of the outside public. The most common use of the consolidated balance sheet is to show the combined financial strength of a holding company and its subsidiary company or companies; also to show in a single statement the assets and liabilities of a main office and its branches or agencies.

In the case of a holding company, there is such an overlapping of interests that the respective stockholders of the holding company and of the several subsidiary companies are unable to determine from a balance sheet taken from the books of each company what the real financial position of the combined undertaking is; this is true because such a balance sheet would not reveal any of the inter-relations of the subsidiary companies to the holding company or vice versa. A consolidated balance sheet obviates this difficulty by representing the true condition of the related companies as viewed in the light of a single undertaking.

It must be distinctly understood that a consolidated balance sheet is not the balance sheet of any corporation, but that it merely represents a condition of affairs following the elimination of all inter-company relations. As such, a consolidated balance sheet has no legal status.

In the preparation of such balance sheet the assets and liabilities of the related companies are combined only in so far as they affect the interests of outside holders of the securities of the companies, the following items being eliminated:

1. Inter-company debts; items which appear as Accounts Receivable or Payable on one balance sheet and as the exact opposite on the other.
2. Capital stock of one company held by another.
3. Bonds of one company held by another.
4. Any other inter-company items which tend to off-set each other when the accounts are combined.

When all items enumerated above have been eliminated the consolidated statement shows the condition of the related companies regarded as a unit, in their relation to the outside public. The accounts and notes receivable are those due from external sources; the accounts and notes payable, those due to outside parties; the capital stock and bond items, those in the hands of outside investors.

A question which frequently arises in preparing a consolidated balance sheet relates to the premium or the discount at which the capital stock of one related company may be carried on the books of another of the companies.

Arthur Lowes Dickinson says that such a premium or discount "represents an addition to or diminution of Goodwill in the final balance sheet." Other authorities are of the opinion that such items should be merged with capital Surplus.

A *Consolidated Profit and Loss Statement* is prepared on the same general principles. "Profits resulting to one company out of sales to another are eliminated. Only sales and purchases to and from the outside public are included, so that no profits are considered except those made on deliveries outside the organization. In other words, the whole organization is considered as merely a series of separate works under the same ownership; and the same accounting principles which would apply to a corporation owning several factories are applied to the corporation owning the stocks of a number of subsidiary companies, all the companies in the group themselves owning and operating their own factories."

In compiling a consolidated balance sheet the work may be simplified by using analysis paper with columns headed as illustrated in the outline given below. Let it be assumed that X is a holding company and Y and Z are subsidiary companies.

CONSOLIDATED BALANCE SHEET OF COMPANIES X, Y AND Z

December 31, 1915

ASSETS

Assets	Company X	Company Y	Company Z	Eliminations	Consolidated Assets

LIABILITIES

Liabilities	Company X	Company Y	Company Z	Eliminations	Consolidated Capital and Surplus

ENTRIES TO BE MADE INVOLVING A MERGER OR AN AMALGAMATION

Entries on the Books of The Vendee Company

1. Debit all assets (including Goodwill) taken over and credit the vendor company, or the trustee.
2. Debit the vendor company or trustee and credit the accounts representing liabilities assumed by the vendee company.
3. Debit the vendor company's account and credit Cash, Capital Stock, or Bonds Outstanding for whatever was given to the vendor company in exchange for the net assets.
4. If the amount paid for the net assets is in excess of the value at which they have been brought onto the book charge Organization Expenses and credit the vendor company's account for the difference. If the amount paid for the net assets is less than the value at which they are carried onto the books debit the vendor company's account and credit Working Capital Donated or Capital Surplus.
5. Charge any expenses that have been incurred incidental to the absorption of the vendor company to Organization Expenses. The organization expenses are presumably written off over a stated period of years.

Entries on the Books of the Vendor Company (First Method).

1. Bring on to the books the Goodwill incidental to the sale of the business by charging Goodwill account and crediting Surplus.
2. Charge the assets (including Goodwill) sold to the vendee company or the trustee by debiting the vendee company and crediting the various asset accounts.

3. If the vendee company assumes any or all of the liabilities of the vendor company, credit the vendee company or trustee for the liabilities assumed by debiting the various liability accounts and crediting the vendee company's account.

4. Credit the vendee company for cash, capital stock, bonds, or other assets received from them in payment for the net assets by debiting the proper asset account or accounts and crediting the vendee company.

5. If the amount received from the vendee company in payment of the net assets is greater than the value at which they are carried on the books of the vendor company, debit the vendee company's account and credit Profit and Loss in Liquidation for the difference. If the amount received in payment of the net assets is less than their book value, debit Profit and Loss in Liquidation and credit the vendee company's account.

6. Pay off any liabilities not assumed by the vendee company debiting the proper liability accounts and crediting Cash.

7. If any expenses have been incurred incidental to the sale of the business, charge the proper expense accounts and credit Cash; the detailed expense accounts will then close into Profit and Loss in Liquidation by debiting Surplus and crediting the detailed expense accounts.

8. Transfer the net profit or loss incidental to the sale of the business to Surplus account.

9. Charge Capital Stock and Surplus (provided it shows a credit balance) and credit Cash, Capital Stock of the Vendee Company, Bonds of the Vendee Company and any other accounts representing assets distributed among the stockholders.

Entries on the Vendee Company's Books (Second Method)

1. Transfer all assets sold to the vendee company to a Realization account by debiting realization for the total assets sold and credit the various asset accounts.

2. Transfer any liabilities assumed by the vendee company to the Realization account by debiting the proper liability accounts and crediting Realization account.

3. Debit the Vendee Company's or trustee's account and credit Realization account for the agreed on price of the net assets turned over to the vendee company.

4. Bring on to the books the cash, stock or bonds received from the vendee company in payment for the net assets by debiting the proper assets accounts and crediting the Vendee Company's account.

5. If there have been any expenses incurred in connection with the sale of the business, debit the proper expense accounts and credit Cash.

6. Close the accounts representing expenses incurred in connection with the sale of the business into the Realization account by debiting Realization and crediting the detailed expense accounts.

7. Transfer the net profit or loss on the sale of the business as represented by the balance of the Realization accounts to Surplus.

8. Make the entry representing the distribution among the stockholders of cash, stock or bonds of the vendee company and assets not sold by debiting Capital Stock and Surplus accounts and crediting the accounts representing assets distributed.

ENTRIES TO BE MADE WHEN A CORPORATION VOLUNTARILY LIQUIDATES

First Method

1. Debit Cash or the other proper asset account or accounts with the amounts or items received in realizing on the assets of the concern and credit the various asset accounts.

2. Charge the various liability accounts and credit Cash for amounts paid in liquidation of the liabilities.

3. Close any profits that have been realized from the sale of the assets into a Profit and Loss in Liquidation account by debiting the accounts representing assets which have been disposed of at a profit, and crediting Profit and Loss in Liquidation.

4. Close the losses sustained in realizing on assets into the Profit and Loss in Liquidation account by debiting this account and crediting the accounts representing assets which have been disposed of at less than their book value.

5. Close the profit resulting from liabilities not paid in full into the Profit and Loss in Liquidation account by charging the accounts representing liabilities not paid in full and crediting Profit and Loss in Liquidation.

6. Close the expenses incurred during the period of liquidation into Profit and Loss in Liquidation account by debiting this account and crediting Liquidation Expenses or the detailed expense accounts.

7. Transfer the profit or loss incidental to the liquidation of the business from the Profit and Loss in Liquidation account to Surplus or Deficit.

8. Debit Capital Stock account and Surplus Account (provided it shows a credit balance) and credit Cash and other asset accounts representing cash and other assets distributed to stockholders. (If the Surplus or Deficit account has a debit balance, this account will, of course, be credited when the final distribution is made.)

Second Method

1. Debit Realization and Liquidation for the total assets to be realized and credit the accounts representing the assets to be realized.

2. Debit the various liability accounts to be liquidated and credit realization and liquidation for the total liabilities to be liquidated.

3. Debit Cash or other accounts representing items received in realizing on assets disposed of and credit Realization and Liquidation for amounts received in realizing on assets.

4. Debit Realization and Liquidation and credit Cash for amounts paid in liquidation of liabilities.

5. Charge Realization and Liquidation for expenses incurred during the period of liquidation, crediting Liquidation Expenses or the proper detailed expense accounts.

6. Transfer the profit or loss incidental to the liquidation of the business from the Realization and Liquidation account to Surplus or Deficit, as the case may be.

7. Debit Capital Stock and Surplus accounts and credit Cash and other assets distributed to the stockholders.

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Klein, Joseph J., "Elements of Accounting"—pp. 145-154.
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PROBLEMS

32. Company A buys a controlling interest (810 shares) in Company B for \$81,000. Company B has stock issued and outstanding of \$150,000.

Later on a majority of the stockholders of Company B vote to accept two shares of stock of Company A for three shares of Company B, Company A to take over all assets and assume all liabilities of Company B at their book values. The stockholders of Company B elect a trustee to wind up its affairs. He calls in all outstanding shares of Company B, cancels them, authorizes Company A to issue the stock it agrees to issue in accordance with a list which he furnishes showing the names of Company B stockholders, the number of Company B shares they have turned in and the number of shares of Company A stock to which they are entitled. Company A issues the shares in accordance with the list furnished and delivers such shares to the trustee. He delivers them to the Company B stockholders, procuring their receipts therefore which he turns back to Company A.

a. Show by means of journal entries how the affairs of Company B would be wound up.

b. Show by means of journal entries how the merger would be effected on Company A books.

BALANCE SHEET OF COMPANY B

ASSETS		LIABILITIES	
Cash	\$3,000	Accounts Payable	\$61,000
Accounts Receivable	47,000	Notes Payable	140,000
Inventory	160,000	Capital Stock	150,000
Plant and Equipment	150,000	Surplus	9,000
	<hr/>		<hr/>
	\$360,000		\$360,000

33. (From Massachusetts C. P. A. Examination, April, 1911.)

A. B. Co. was an old established corporation with a capital stock liability of \$600,000. C. D. Co. was a corporation, organized June 1, 1907, at which time it issued, for cash, \$1,000 of \$600,000 capital stock authorized. The \$1,000 capital stock issued by C. D. Co. was acquired by A. B. Co., June 1, 1907. The par value of the shares of both corporations, was \$100. December 31, 1907, C. D. Co. bought of A. B. Co., all of the latter's property, except the ten shares stock of C. D. Co., and assumed all of the debts of A. B. Co.; issuing, to the latter, in settlement therefor, the remainder of C. D. Co.'s authorized capital stock; entered, in its books, the property acquired and debts assumed, at the respective amounts shown in the books of A. B. Co.; and continued as a going concern. At the same date, A. B. Co. liquidated its affairs, distributing to its shareholders the capital stock which it received from C. D. Co.

BALANCE SHEET OF A. B. CO.

December 31, 1917

Cash advanced to C. D. Co., December 31, 1907	\$21,800	C. D. Co., Current Account	\$31,600
Notes Receivable	42,000	Notes Payable	125,000
Accounts Receivable	145,200	Accounts Payable	43,400
Merchandise	540,000	Capital Stock Account	600,000
Real Estate and Machinery	150,000	Profit and Loss Account	100,000
Stock of C. D. Co.	1,000		
	<hr/>		<hr/>
	\$900,000		\$900,000

The trial balance of C. D. Co. contained a credit: "Cash advanced by A. B. Co., December 31, 1907," \$21,800; and a debit: "A. B. Co., Current Account, \$31,600." Write the journal entries, stating sufficient explanation for each, to close the books of A. B. Co., and to spread the above transactions of December 31, 1907, on the books of C. D. Co.

34. (From Massachusetts C. P. A. Examination, June, 1913.)

The A. B. Company, capital stock \$200,000, represented by cash on hand, has bought all of the capital stock of the C. D. Company, a going concern. In payment, the A. B. Company has used \$50,000 cash, and has issued \$100,000 First Mortgage Bonds, dated January 1, 1900, due January 1, 1930. These bonds bear interest at 5%, payable January 1 and July 1 of each year. The purchase was made March 31, 1900, and at that date the balance sheet of the C. D. Company was as follows:

ASSETS		LIABILITIES	
Cash	\$5,000	Notes Payable	\$5,000
Accounts Receivable	40,000	Accounts Payable	15,000
Merchandise	35,000	Capital Stock	100,000
Plant and Machinery	60,000	Surplus	20,000
	<hr/>		<hr/>
	\$140,000		\$140,000

On June 10, 1900, a dividend of 10% was declared on C. D. Company stock, payable July 1, 1900, and the A. B. Company took over and succeeded to the business.

At the closing of the books, after payment of the dividend on July 1, 1900, the balance sheet of the C. D. Company was as follows:

ASSETS		LIABILITIES	
Cash	\$500	Accounts Payable	\$5,000
Accounts Receivable	55,000	Capital Stock	100,000
Merchandise	19,500	Surplus	30,000
Plant and Machinery	60,000		
	<u>\$135,000</u>		<u>\$135,000</u>

Show the balance sheet of the A. B. Company as at March 31, 1900, and as at July 1, 1900.

35. (From Massachusetts C. P. A. Examination, October, 1914.)

The Balance Sheet of the A. B. C. Company is as follows:

ASSETS		
Current:		
Cash	\$25,000.00	
Accounts Receivable	350,000.00	
Notes Receivable	1,000.00	
	<u> </u>	\$376,000.00
Work in progress at cost.....	500,000.00	
Less advanced payments.....	<u>400,000.00</u>	
	\$100,000.00	
Merchandise, Materials and Supplies.....	250,000.00	
	<u> </u>	350,000.00
Investments:		
Acme Co. Bond.....	1,000.00	
Stock in other companies.....	200,000.00	
	<u> </u>	201,000.00
		<u> </u>
		\$927,000.00
Plant:		
Real Estate, Main Plant.....	1,000,000.00	
Less Reserve for Depreciation.....	<u>50,000.00</u>	
	950,000.00	
Real Estate, Branch.....	400,000.00	
Less Mortgage	<u>50,000.00</u>	
	350,000.00	
Machinery and Equipment.....	1,000,000.00	
Less Reserve for Depreciation.....	<u>75,000.00</u>	
	925,000.00	
	<u> </u>	2,225,000.00
		<u> </u>
		\$3,152,000.00
Goodwill:		
Goodwill Account	1,000,000.00	
Patent Rights	600,000.00	
Organization Expense	<u>100,000.00</u>	
	1,700,000.00	
Deferred Charges:		
Unexpired Insurance	20,000.00	
Prepaid Interest	5,000.00	
Personal Advances	<u>2,000.00</u>	
	27,000.00	
Accounts Receivable in Suspense.....	300,000.00	
	<u> </u>	2,027,000.00
Deficit		3,016,000.00
		<u> </u>
		\$8,195,000.00

LIABILITIES

Current:

Accounts Payable	\$300,000.00	
Accrued Wages	10,000.00	
Accrued Taxes	5,000.00	
Accrued Commissions	10,000.00	
		<u>\$325,000.00</u>
Notes Payable		800,000.00
		<u>\$1,125,000.00</u>

Capital Stock:

Preferred	2,000,000.00	
Common	5,000,000.00	
		<u>7,000,000.00</u>

Reserves:

For Completion of Contracts.....	70,000.00	
		<u>\$8,195,000.00</u>

A reorganization is effected by a new company, the X. Y. Z. Company, taking over the business. The new company starts with the following bonded debt and capitalization:

First Mortgage 6% 20-year bonds.....	\$1,000,000
7% Preferred Stock	2,000,000
Common Stock	1,250,000
	<u>\$4,250,000</u>

The Stockholders of the old Company agree to participate in the reorganization upon the following terms:

Ninety (90) per cent of the Preferred Stockholders pay \$15 per share on their holdings, \$100 par value, and surrender their stock, and receive in exchange \$15 First Mortgage 6% Bonds, and equal shares Preferred Stock of the new Company \$100 par value, and also receive \$7 per share in lieu of accrued dividends.

Ten (10) per cent. of the Preferred Stockholders do not pay the \$15 per share, but surrender their stock in exchange for Preferred Stock of the new company to an amount equal to 80 per cent. of their holdings and \$7 per share in lieu of accrued dividends, computed upon 80% of their holdings.

Common Stockholders surrender their stock and pay \$5 per share on the whole outstanding common stock of the old company, par value \$100, and receive in exchange \$20 in First Mortgage Bonds of the new company and one (1) share Common Stock of the new company par value \$100 for each 4 shares so surrendered.

The balance of the bonds were used at par to pay debts of the old company, one-half each on Notes Payable and Accounts Payable, and \$300,000 of Notes Payable is paid in Cash. Accrued Profit on work in progress is estimated at \$100,000.

Draft Balance Sheet of the X. Y. Z. Company after conclusion of reorganization.

36. (From New York C. P. A. Examination, February, 1908.)

A corporation is formed with a capital stock of \$500,000 (of which \$200,000 is preferred and \$300,000 is common stock) to acquire and consolidate three existing corporations designated as A, B and C, and having the following status respectively:

	Book Accounts	Liabilities	Surplus	Deficit	Capital
A	\$171,000	\$56,000	\$15,000	.....	\$100,000
B	165,000	80,000	.....	\$5,000	90,000
C	108,000	47,000	6,000	.....	55,000
	<u>\$444,000</u>	<u>\$183,000</u>	<u>\$21,000</u>	<u>\$5,000</u>	<u>\$245,000</u>

The several vendor companies contract with the promoter to sell their assets, excluding cash funds as above stated and including goodwill, at the following prices respectively, viz.: A, \$125,000; B, \$100,000;

*Don't value
not give*

C, \$75,000; payable one-half in cash and one-half in preferred stock to be issued therefor by the new company, which is also to assume all outstanding obligations.

The promoter or vendor contracts with the new or vendee company to acquire the several properties subject to the liabilities as stated and to provide an additional working capital of \$100,000 cash, and to take in payment therefor the entire authorized capital stock of the new company, out of which the subscribing incorporators and directors will acquire their stock by purchase from the underwriters.

The common stock is under-written by bankers at 80% with bonus of one share of preferred to each 10 shares of common stock. The bankers are also to take an additional \$10,000 of preferred stock at par, as part of their agreement.

- a. Frame the opening entries and balance sheet of the vendee company, showing the costs respectively of assets, goodwill and organization expense on the assumption that the terms of the several contracts are known to all the parties concerned and form the basis of the initial values established.
- b. Frame closing entries of "A" Company, showing cancelation of stock and distribution of proceeds of sale among stockholders.
- c. Show promoter's compensation or profit for effecting the consolidation.

37. (From New York C. P. A. Examination, June, 1901.)

A syndicate, formed for the purpose of acquiring controlling interests in several manufacturing companies, had pooled the sum of \$1,200,000, and the securities purchased therewith had been placed in the hands of a trustee.

A company was organized with a subscribed capital of \$5,000,000 (shares \$100 each) of which \$2,000 was paid in cash.

By the terms of an agreement entered into between the company and the trustee, 49,980 shares of stock were to be issued to him for all the securities held by him and \$624,375 in cash was to be paid by him to the company, provision being made, however, that in case the trustee failed to pay the required amount of cash, he was to turn back to the company 3 1/5 shares of stock for each \$100 that he failed to pay.

The trustee being unable to pay any cash, returned stock in lieu thereof, as provided.

The company then offered the members of the syndicate \$3,000 in securities at par, and 25 shares of stock for each \$3,000 contributed to a second pool of \$1,200,000. This offer was accepted and half of the second pool paid in, securities and stock being issued as agreed.

Make entries for the books of the company which will give proper expression to the foregoing transactions. Prepare a balance sheet.

38. (From Examinations for Admittance to the American Institute of Accountants, June, 1917.)

BALANCE SHEET OF A

Property leases and goodwill.....	\$470,133	Capital Stock	\$400,000
Fixtures	81,791	Bonds	100,000
Merchandise Inventory	126,538	Sundry Creditors	59,975
Sundry Debtors	54,642	Surplus	135,886
Sinking Fund Assets	11,690	Pension Fund	5,460
Cash on hand	20,204	Sinking Fund	11,690
		Profit and Loss	51,987
	<hr/>		<hr/>
	\$764,998		\$764,998

BALANCE SHEET OF B

Cash	\$51,195	Preferred Stock	\$800,000
Investments:		Common Stock	123,000
Short time Loans	108,000	Surplus	160,000
Stock of A at Par	100,000	Accounts Payable	141,235
Stock of C at Par	20,000	Notes Payable	4,728
Bonds of Company A at Par (cost) ..	50,000	Profit and Loss	217,254
Railroads and other Bonds at present value	126,070		
Merchandise	366,437		
Sundry Debtors	15,563		
Prepaid Expense	12,715		
Goodwill and Trade Marks	422,900		
Plant and Machinery	173,337		
	<hr/>		<hr/>
	\$1,446,217		\$1,446,217

BALANCE SHEET OF C

Land and Buildings	\$41,438	Capital Stock	\$120,000
Machinery	20,577	Bonds	30,675
Merchandise	19,610	Surplus	34,000
Office Furniture	50	Dividend Declared	1,650
Cash	14,730	Accounts Payable	5,879
Accounts Receivable	21,245	Profit and Loss	12,343
Goodwill at Cost	81,867		
Bonds of Company A, 5,000 at Cost	5,030		
	<hr/>		<hr/>
	\$204,547		\$204,547

Company D is organized for the purpose of consolidating the three companies whose balance sheets are given above, engaged in allied businesses. Company D is authorized to issue \$2,000,000 preferred stock, and \$350,000 common stock. It arranges to buy stock of the subsidiary companies on the following terms:

For Each Share of	Is Offered of	D. Common Stock
A. Stock	1 share.....	1/2 share
B. Preferred	2 shares	
B. Common		1 share
C. Stock	1 share.....	3/4 share

On these terms D acquires \$290,000 of A stock, all the preferred stock of B, \$100,000 of common stock of B, and \$100,000 of C stock. The stock bought was obtained from individual holders, the stock of A and C held by B, as well as some stock held by non-consenting stockholders, not being acquired. The remaining preferred stock of D was held by the company. The rest of the common stock authorized was sold for cash at par. The expenses of organization amounted to \$5,000 and were paid in cash.

Of the accounts receivable held by C, \$20,000 were due from B. Of the sundry debtors on the books of B, \$5,500 were due from A.

Company D also issues \$500,000 bonds which it sells at 105 and pays \$500,000 cash for a plant which it buys direct.

Prepare a consolidated balance sheet.

39. (From Virginia C. P. A. Examination, October, 1911.)

The stockholders of A Company and B Company have decided to form a new corporation (C Company), which is to take over all the assets and assume all the liabilities of both the old companies. The holders of Preferred Stock of the old companies are to receive an equal number of shares of Preferred Stock of the new company. The holders of Common Stock are to take Common Stock of the

new company, at par, to an amount equal to the book value of their holdings in the old companies. Before determining the book value of the old Common Stock, however, an amount equal to two per cent. of the accounts and Bills Receivable of each company is to be deducted from its Surplus and carried to a Reserve Account, to provide for contingent losses.

The condition of the old companies is as follows:

ASSETS		
	A Co.	B Co.
Cash	\$20,231.74	\$43,123.81
Accounts Receivable	296,059.14	759,911.06
Bills Receivable	8,245.08	35,342.09
Merchandise Inventory	212,636.81	393,937.46
Land and Buildings.....	42,689.42	174,156.97
Machinery	31,222.97	69,160.35
Furniture and Fixtures.....	2,500.00	5,000.00
Investments	8,000.00	4,550.00
Prepaid Taxes and Insurance.....	1,014.20	.....
	<hr/>	<hr/>
	\$622,599.36	\$1,487,528.22

LIABILITIES		
	A Co.	B Co.
Accounts Payable	\$204,669.18	\$244,169.44
Bills Payable	86,844.10	227,454.72
Preferred Stock	100,000.00	200,000.00
Common Stock	150,000.00	400,000.00
Surplus	81,086.08	415,905.06
	<hr/>	<hr/>
	\$622,599.36	\$1,487,528.22

The holders of Common Stock in the old companies are as follows:

	A Co.	B Co.
Smith	400 shares	1,200 shares
Jones	300 shares	
Brown	150 shares	
Black	50 shares	2,000 shares
White	600 shares	
Green		500 shares
Henry		300 shares
	<hr/>	<hr/>
	1,500 shares	4,000 shares

Draft the Journal entries necessary to effect the consolidation.

Show the final book value of Common Stock of each of the old companies.

Show the number of shares of Common Stock of the new company to be received by each of the holders of Common Stock of the old companies.

Prepare a Balance Sheet, showing condition of C Company, after taking over the assets and liabilities of the old companies.

40. (From Massachusetts C. P. A. Examination, October, 1915.)

A "blank" firm is engaged in the lumber business owning timber lands in fee and licensed, saw mills and other equipment and 90% of the stock in another lumber corporation. They instruct an accountant to

examine their accounts for the purpose of ascertaining the true financial position. The following is a trial balance from the firm's books December 31, 1914, after closing:

	Dr.	Cr.
Cash	\$20,000.00	
Accounts Receivable	150,000.00	
Logs and Mfg. Lumber.....	200,000.00	
Advances on account of season's logging operations.....	100,000.00	
Investments in controlled company 900 shares (cost).....	99,000.00	
Timber lands (cost).....	500,000.00	
Mill Plants and Equipment (cost).....	250,000.00	
Loans Payable		\$150,000.00
Accounts Payable		250,000.00
Deposits on Orders.....		50,000.00
Mortgage on Plants		150,000.00
Controlled Company Current Acct.....	20,000.00	
Partner's Capital		739,000.00
	<hr/>	<hr/>
	1,339,000.00	1,339,000.00

The controlled company's trial balance December 31, 1914, was:

Cash	\$5,000.00	
Accounts Receivable	70,000.00	
Logs and Mfg. Lumber.....	40,000.00	
Timber lands	50,000.00	
Mills	100,000.00	
Mills Payable		100,000.00
Blank Firm		30,000.00
Accounts Payable		20,000.00
Capital		100,000.00
Surplus		15,000.00
	<hr/>	<hr/>
	\$265,000.00	\$265,000.00

The following matters disclosed by the accountant's examination were not included in the accounts prior to closing December 31, 1914. The appraised value of the timber lands of the firm consisting of 200 square miles is \$3,000 per square mile and those of the controlled company 20 square miles at the same price per square mile, and the owners wish these taken up in the accounts. There are unpaid license fees on the timber lands of the firm due in 1920 of \$8.00 per square mile which must be paid to retain the privilege of cutting the timber under the stumpage agreement. \$50,000 of the Bills Payable of the controlled company were endorsed by the firm and the latter also discounted customers' notes amounting to \$25,000. The difference in the intercompany accounts consisted of a charge by the firm to advances on logging operations instead of to the controlled company. There were prepaid taxes in the controlled company of \$2,000. The stock on hand of logs and lumber were pledged as security for loans of \$100,000.

Prepare:

- Adjusting entries for above.
- Corrected Trial Balances.
- Consolidated Balance Sheet.
- Write a brief report covering the examination and Balance Sheet.

41. (From New York C. P. A. Examination, January, 1913.)

Company C was incorporated in May, 1910, to acquire the stock of Companies A and B. Company C's capital stock is divided into preferred, \$2,500,000; common, \$1,500,000; all the stock is outstanding and fully paid; it has been issued (1) for stock to the stockholders of Companies A and B, (2) \$20,000 of preferred for organization expenses, (3) for cash. The stockholders of A and B received preferred stock for the intrinsic, undepreciated book value of the assets, as reflected by the following balance sheets of their companies at June 30, 1910, and \$300,000 of common stock divisible equally between Companies A and B.

ASSETS

Plant Land	\$90,000	\$195,000
Building and Equipment.....	254,000	318,000
Machinery and Tools.....	228,600	276,800
Transportation Equipment	21,000	17,000
Investment in Land.....	.....	150,000
Investment in Bonds—Co. B.....	60,000	.....
Investment—Stocks	200,000	.....
Goods in Process.....	45,000	49,341
Finished Goods.....	69,000	76,340
Material and Supplies.....	58,000	51,300
Cash	17,420	19,175
Accounts Receivable	51,000	92,800
Demand Notes—Co. B.....	5,000	.....
Accrued Interest	1,800	.....
	<hr/>	<hr/>
	\$1,100,820	\$1,245,756

LIABILITIES

Capital Stock Outstanding:

Common	\$700,000	\$1,000,000
Preferred	100,000	.....
6% Bonds, 1915, J. & J. and Interest Accrued .....	.....	92,700
Accounts Payable	59,800	41,656
Loans Payable	63,800	35,000
Audited Vouchers Unpaid.....	18,320	13,400
Demand Notes Payable.....	.....	5,000
Reserve for Depreciation.....	24,900	30,000
Reserve for Doubtful Accounts.....	5,000	2,000
Reserve for Contingencies.....	18,000	.....
Surplus	111,000	26,000
	<hr/>	<hr/>
	\$1,100,820	\$1,245,756

Between July 1 and July 31, 1910, the following transactions occurred: organization expenses paid in cash by Company C, \$5,000; inter-company advances by C: to A, \$60,000; to B, \$60,000; Company A reduced its accounts payable by \$25,000; its loans payable by \$30,000 and its audited vouchers by \$15,000; Company B reduced its accounts payable by \$29,500, liquidated its audited vouchers unpaid and its interest due under the bonds.

The manufacturing operations of the period show: Company A—labor, \$10,000; overhead expenses, \$8,000; materials consumed, \$9,886; inventory of goods in process, \$46,300; of finished goods, \$50,740; selling expenses paid, \$1,600; administration expenses, \$2,500; sales, \$72,500; collections of open accounts, \$86,400. Company B—labor, \$3,600; overhead, \$2,350; materials, \$5,210; inventory of goods in process, \$40,500; of finished goods, \$46,380; sales, \$98,000; collections, \$109,150; administration expenses, \$3,000.75; selling expenses, \$1,040.

No materials were purchased during the period and the current expenses were paid as soon as the invoices were audited. Company A declared a dividend of \$100,000 and Company B a dividend of \$25,000.

Prepare the consolidated balance sheet of Companies A and B and C, at July 31, 1910, to be submitted to the directors of Company C and so arranged as to show them the exact detail of the properties that they control.

42. (From Massachusetts 1915 C. P. A. Examination in Practical Accounting.)

Four corporations are controlled by one of the companies through stock ownership. They operate as separate concerns, buying and selling to each other and to outside parties. For preparing a consolidated balance sheet and profit and loss account the following is required for each company:

- a. First cost of product sold.
- b. Inter-company profit on sales.
- c. Stock on hand.

Prepare statement showing above from the following:

The combination consists of companies W, X, Y, and Z. Company W purchases raw material and sells \$20,000 to outside parties and \$60,000 cost price to Company X for \$60,000, leaving \$20,000 on hand. Company X spends \$34,000 in manufacture and ships over Company Y's railroad \$70,000 to Company Z and \$20,000 to outside parties. Company Z pays Company X \$77,000 for the goods and pays Company Y freight \$5,000 which cost the latter \$3,500; expends \$18,000 in manufacturing and sells \$70,000 worth of finished product to outside parties, leaving a balance on hand.

43. (From Massachusetts 1916 C. P. A. Examination in Practical Accounting.)

Smith and Company and Jones Company being pressed by their bankers and obliged to pay off their loans, agree to consolidate. Their liabilities, capital and earnings are as follows:

	Smith Co.	Jones Co.
Common Stock	\$200,000	\$100,000
Five Per Cent. Bonds.....	100,000	Nil
Six Per Cent. Loans.....	25,000	50,000
Surplus	30,000	Nil
	<hr/>	<hr/>
Together	\$355,000	\$150,000
Earnings available for interest and dividends.....	22,500	10,000
Together		32,500

Smith Company issues \$100,000 additional Common Stock and \$100,000 additional Bonds and buy up Jones Company, which will be liquidated. The total expenses of liquidation and issue of new stock and bonds amount to \$10,000, and the cash balance will be increased by \$15,000. No increased profits are anticipated from the consolidation but it is considered that the earnings of \$32,500 can be maintained. Owing to the condition of Jones Company it is decided that its stockholders should receive \$1,000 less income per annum.

a. How much of the \$100,000 of additional capital stock of Smith Company should be issued to the stockholders of Jones Company, and how much is available for stock dividend to Smith Company Stockholders?

b. Show the entries to record all the transactions on the books of Smith Company.

44. (From Massachusetts 1916 C. P. A. Examination in Practical Accounting.)

Prepare a consolidated balance sheet of "A Company," a manufacturing corporation, which also controls through stock ownership "B Company."

The following are trial balances of the books December 31, 1915:

A COMPANY		Dr.	Cr.
Real Estate		\$200,000	
Machinery and Equipment.....		100,000	
Accounts Receivable		50,000	
Cash		10,000	
Inventories Dec. 31, 1915.....		75,000	
Shares "B Company" 300 shares par \$100.....		35,000	
"B Company" current account.....		5,000	
Capital			\$400,000
Accounts Payable			30,000
Bills Payable			20,000
Surplus			19,000
Profit and Loss for 1915.....			6,000
		<hr/>	<hr/>
		\$475,000	\$475,000

B COMPANY

	Dr.	Cr.
Accounts Receivable	\$45,000	
Stock on hand Dec. 31, 1915.....	25,000	
Cash	5,000	
Treasury Stock, 100 shares cost.....	11,000	
Furniture and Fixtures.....	3,500	
Surplus		\$20,000
"A Company" current account.....		4,500
Accounts payable		10,000
"A Company" drafts accepted.....		5,000
Capital Stock (500 shares par \$100).....		50,000
	\$89,500	\$89,500

The stock on hand of the "B Company" was manufactured by "A Company" and billed to "B Company" at 10 per cent. in excess of cost, at which value it is taken in the inventory. The difference in the inter-company current accounts consists of a note issued by "B Company" in settlement of a claim for damages but not entered on the books and was paid by "A Company." The "B Company" directors declared a dividend of 1½ per cent. on December 15, 1915, payable January 15, 1916, which has not been entered on the books.

45. (From Washington C. P. A. Examination, September, 1914.)

The following are Balance Sheets of two companies at December 31, 1913:

COMPANY "A"

Assets:

Real Estate, Buildings, Machinery and Equipment	\$1,000,000.00
Investments	320,000.00
Inventories	240,000.00
Accounts Receivable (Less Reserve of \$10,000.00)	510,000.00
Cash	55,000.00
Deferred Charges to Operations.....	25,000.00
	\$2,150,000.00

Liabilities:

Capital Stock—Common (par \$100.00).....	\$750,000.00
Capital Stock—Preferred (par \$100.00).....	200,000.00
Mortgage on Plant Site.....	100,000.00
Bills Payable	200,000.00
Accounts Payable	400,000.00
Surplus	500,000.00
	\$2,150,000.00

COMPANY "B"

Assets:

Plant and Equipment.....	\$200,000.00
Goodwill	200,000.00
Inventories	100,000.00
Accounts Receivable	140,000.00
Cash	20,000.00
Deferred Charges to Operations.....	10,000.00
	\$670,000.00

Liabilities:

Capital Stock—Common (par \$100.00).....	\$200,000.00
Capital Stock—Preferred (par \$100.00).....	200,000.00
Bills Payable	20,000.00
Accounts Payable	120,000.00
Surplus	130,000.00
	<hr/>
	\$670,000.00

You have audited the accounts of the two companies. The accounts of Company "A" are found in order as stated above. The accounts of Company "B" are, however, subject to two adjustments, viz.:

The inventories have been over-valued \$20,000.00 and a Reserve for Bad and Doubtful Accounts of \$10,000.00 should, in your opinion, be provided for. These adjustments you are to make.

Company "A" has acquired all of the Preferred Stock of Company "B" and all of the Common stock, except 20 shares. The cost of the Company "B" stock to Company "A" was \$300,000.00 and the same is included in the Investments Account.

No consideration was received by Company "B" upon the issuance of its Common stock, the same having been given away as a bonus in connection with the sale of the Preferred stock at par.

Company "B" owes Company "A" \$20,000.00 on current account, this amount being included in the Accounts Payable and Accounts Receivable.

Required—a Consolidated Balance Sheet setting forth the combined financial condition of Company "A" and its subsidiary Company "B."

46. (From Wisconsin C. P. A. Examination, May, 1916.)

On January 1, 1916, a corporation, the "C" Company, was formed with a capital stock of \$6,000,000, of which \$5,000,000 was common stock and \$1,000,000 was preferred stock. The "C" company as of January 1, 1916, purchased the capital stocks of "A" and "B" companies, balance sheets of which at December 31, 1915, are shown below. The preferred stock of the "C" company was sold to the public for cash at par, the stockholders of the "A" company received the entire \$5,000,000 of the common stock of the "C" company for their holdings in the "A" company, while the stockholders of the "B" company were paid \$500,000 in cash for their holdings in the "B" company.

Prepare a consolidated balance sheet showing the financial position of the "C" company as of January 1, 1916, after giving effect to the foregoing transactions. Your working papers should show the process by which you arrive at the final balance sheet figures.

It should also be understood that the "A" company had in its inventory at December 31, 1915, materials valued at \$250,000, purchased from the "B" company on which the "B" company had made a gross profit of 20 per cent.

"A" COMPANY

BALANCE SHEET—DECEMBER 31, 1915

ASSETS		LIABILITIES	
Real estate, buildings, machinery and equipment	\$1,000,000	Capital stock, 15,000 shares, \$100 each..	\$1,500,000
Inventories	1,500,000	Notes payable—"B" company.....	100,000
Accounts receivable	500,000	Others	400,000
Cash	50,000	Accounts payable—"B" company.....	100,000
Prepaid insurance and taxes.....	10,000	Others	700,000
		Surplus	260,000
	<hr/>		<hr/>
	\$3,060,000		\$3,060,000

"B" COMPANY

BALANCE SHEET—DECEMBER 31, 1915

ASSETS		LIABILITIES	
Real estate, buildings, machinery and equipment	\$250,000	Capital stock—1,000 shares, \$100 each..	\$100,000
Inventories	75,000	Accounts payable	140,000
Accounts receivable—"A" company....	100,000	Surplus	262,000
Others	50,000	Contingent liability in respect of notes of "A" company discounted at banks,	\$100,000
Cash	25,000		
Prepaid insurance and taxes.....	2,000		
	<hr/>		<hr/>
	\$502,000		\$502,000

47. (From Massachusetts C. P. A. Examination, June, 1913.)

On January 1, 1912, the Treasurer's books of a gas company show the following figures: Cash on hand, \$55,537; Gas Works, \$878,027; Street Mains, \$68,814; Due from Assistant Treasurer, \$184,387; Notes Payable, \$100,000; Dividends Payable, \$12,000; Capital Stock, \$925,000; Surplus, \$149,765. The Assistant Treasurer's books show: Cash on hand, \$1,060; Inventories, \$77,788; Accounts Receivable, \$44,504; Construction in Progress, \$58,980; New Mains, \$18,687; Meters, \$29,332; Expenses Paid in Advance, \$2,514; Accounts Payable, \$9,755; Deposits (by customers, to secure payment of bills), \$31,230; General Expenses, accrued but not due, \$7,493; due the Treasurer, \$184,387.

From January 1, 1912, to June 30, 1912, the Treasurer receives \$35,500 cash from the Assistant Treasurer, and \$58 interest from the bank. He pays \$30,500 on dividends; \$26,000 on notes payable, \$3,400 for interest; \$5,000 for salaries; \$11 for general expense; \$10,885 for additions to gas works.

The directors declared a dividend payable June 30, amounting to \$18,500.

The Assistant Treasurer's books for the same period show sales of gas amounting to \$132,097. The voucher book shows a credit to Accounts Payable of \$124,190, charged respectively to Construction in Progress, \$7,924; New Street Mains, \$7,712; Meters, \$2,055; Expenses Paid in Advance, \$6,328; Material, \$35,277; Labor, \$8,224; Manufacturing Expense, \$15,608; Maintenance Street Mains, \$7,339; Office Expense, \$7,009; General Expense, \$26,714. The Assistant Treasurer's cash book shows receipts from customers on account of gas sales, \$140,848; from customers on account of Deposits, \$911; payments on account of Accounts Payable, \$105,509; payments to the Treasurer, \$35,500.

The Inventories of June 30 amounted to \$75,347. The general expense, accrued but not due on June 30, were calculated to amount to \$2,050. The expenses, paid in advance on June 30, were calculated to amount to \$8,842.

Transfer the operating profit or loss to the Treasurer's books and give a consolidated balance sheet of the company June 30, 1912, which shall show the Treasurer's books and the Assistant Treasurer's books in balance with each other, and the condition of the company as a single entity on that date.

PART IV

BOND ISSUES AND SINKING FUNDS

It is not necessary in this connection to discuss the numerous types of bonds which enter into the financial schemes of railroads and industrial corporations, to consider interest rates at which they may be issued, or the relation which, under given conditions, the funded debt of a company should bear to its total capitalization. These and many other interesting problems connected with bond issues belong to the field of corporation finance; further, it can be presumed that the readers of these notes are already familiar with the general principles underlying the financial policy of corporations of all classes as regards their funded debt.

From an accounting standpoint, however, it is well to define the function of the accounts which are associated with bond issues and with sinking funds established for their redemption, of which the following are the most common:

BONDS

Dr.:

With the par value of bonds redeemed or refunded.

Cr.:

With the par value of bonds issued.

The balance is a credit and represents the par value of bonds issued and outstanding. Bonds are usually classed as a fixed liability, or under the head of Funded Debt.

The title given to the account is usually the name by which the bonds are designated; as: First Mortgage Bonds; Six Per Cent. Collateral Trust Bonds; Debenture Bonds.

BOND PREMIUM

Dr.:

The bond premium should be amortized, or written off over the term for which the bonds were issued. As the premium realized on the sale of bonds is regarded as reducing the nominal rate of interest which they bear, an adjusting entry should be made at each closing of the books debiting Bond Premium and crediting Interest on Bonds for the proportion of bond premium applicable to the period.

Cr.:

With premium realized on bonds sold above par.

The balance represents the unextinguished portion of the bond premium and should be shown in the balance sheet among the liabilities as a Deferred Credit to Profit and Loss or as a special reserve.

BOND DISCOUNT

Dr.:

With discount on bonds sold below par.

Cr.:

The bond discount results in an increase in the nominal rate of bond interest; and adjusting entry should therefore be made at the time of closing the books debiting interest on Bonds and crediting Bond Discount for the proportion of Bond Discount applicable to the period.

The balance represents the unextinguished portion of the bond discount and should be shown as a Deferred Charge to Profit and Loss.

Sinking Funds and accounts pertaining thereto have to do with the provisions made by a company paying off a funded debt at maturity. A Sinking Fund in a strict sense relates to a fund created by withdrawing from the general cash each year such an amount as, together with interest accumulations, will equal the debt at maturity. In adopting a policy of making provisions for the future redemption of bonds, however, the practice of corporations as reflected in the accounting records is not at all uniform. There are, in fact, three common methods, each of which requires a different treatment.

1. In accordance with the strict interpretation of such a policy, a certain sum of money would be set aside periodically or paid over to Sinking Fund trustees. In such a case the following account would be opened and debited and credited as stated below:

BOND SINKING FUND

Dr.:

With cash instalments set aside in a sinking fund for the purpose of providing the actual cash needed to meet an issue of bonds falling due at a certain time.

With income derived from sinking fund investments or with interest received on sinking fund cash as reported by the sinking fund trustees; such income may be used to reduce the succeeding instalment. The corresponding credit would be to an account with Income from Bond Sinking Fund. If there is a sinking fund reserve account, the credit would be to that account.

Cr.:

With cash payments from the fund to retire the bonds for which the fund was set aside.

The balance is an asset showing the amount of the fund at any time.

2. The bond indenture may not obligate the company to set aside regular cash instalments by which a sinking fund would be built up; the interest of the bondholders would instead be safeguarded by the creation of a reserve set aside out of profits or accumulated surplus. This prevents all earnings from being used for dividends and results in increasing the margin of safety as shown by the excess of assets over liabilities; the financial position of the company is thus strengthened and the company would be in a position to raise the money to retire the bonds at maturity or to refund the issue falling due. Under such conditions the following account would be opened:

RESERVE FOR BOND SINKING FUND

Dr.:

When bonds are redeemed at maturity, the reserve created while the bonds were outstanding is thrown back into Surplus, this account being debited and Surplus credited.

Cr.:

Periodically with such an amount reserved from profits as will create a reserve sufficient to provide for the redemption of the bonds at maturity, in compliance with the "sinking fund indenture" under which such bonds are issued.

The balance is a credit and should be shown on the liability side of the balance sheet under the sub-heading Reserves or under Surplus.

3. A third policy regarding sinking funds is a combination of the other two; that is, a reserve is created out of profits by crediting the reserve for such an amount each year as will make adequate provision for the redemption of the bonds, which reserve is also funded by setting aside at the same time an equal amount of cash. This method not only provides the cash with which to redeem the bonds at maturity, but at the same time conserves the earnings to a like extent. If no reserve is set aside all earnings could be dissipated and the money borrowed if need be to meet the sinking fund instalments; this policy if continued would materially weaken the financial position of the company and endanger the interests of the stockholders and the other creditors.

The indenture under which the bonds are issued usually provides for the appointment of Sinking Fund trustees, who become responsible for the care and investment of the fund; the trustees would in such a case keep separate accounts to record all transactions having to do with the receipt of the cash instalments, the investment of the same, the collection of the income, and finally the liquidation of the investments and the return of the cash to the company to be used in paying off the bonds.

Following is an explanation of the function of the accounts which would usually be necessary:

SINKING FUND

Dr.:	Cr.:
With any reduction in book value of sinking fund investments.	With annual instalments paid into the fund by the company.
With loss on sale of sinking fund securities.	With income from sinking fund investments added to the fund.
	With profit realized on sale of sinking fund securities.

The balance is a credit and represents the amount of the Sinking Fund for which the Sinking Fund Trustees are accountable to the company.

SINKING FUND CASH

Dr.:	Cr.:
With cash instalments received from company for the creation of the sinking fund.	With cost of investments purchased.
With cash restored to this account from Sinking Fund Income Cash account in lieu of accrued interest paid for when securities were purchased.	
With balance of income transferred annually from the Income Cash account.	
With amount realized from the sale of sinking fund investments.	

The balance is a debit and represents at any time the uninvested portion of the Sinking Fund Cash.

SINKING FUND INVESTMENTS

Dr.:	Cr.:
With cost of securities purchased by Sinking Fund Trustees.	With cost of securities sold.
	With any reduction in book value of securities.

The balance is a debit and represents the cost of sinking fund securities held by trustees.

SINKING FUND INCOME

Dr.:	Cr.:
With accrued interest on sinking fund securities purchased.	With all income received from sinking fund.
	With accrued interest on sinking fund securities sold.

The balance is a credit and shows the net income realized from sinking fund. This account is closed into the Sinking Fund account annually, thus reducing each succeeding instalment.

SINKING FUND INCOME CASH

Dr.:	Cr.:
With income received in cash from sinking fund investments.	With cash transferred to Sinking Fund Cash to restore to that account the cash paid out of principal in lieu of accrued interest on securities purchased.

The balance is a debit representing the balance of income cash on hand, and should agree with the credit of Sinking Fund Income. At the end of the year this account is closed into Sinking Fund Cash account.

After all adjustments have been made the sum of the balances to the debit of Sinking Fund Cash and Sinking Fund Investments should equal the credit to the Sinking Fund account.

The terms of the sinking fund agreement may provide for the purchase by the trustee of the company's own bonds either in the open market or by the drawing of certain bonds by lot; if drawn by lot, the bonds are usually redeemed at a small premium as stated in the bond indenture. The interest on drawn bonds

ceases to the public on the first interest date following the drawing of the bonds, but the bonds are kept alive and the interest thereon collected by the trustee throughout the life of the bonds, thus becoming part of the income derived from sinking fund investments. The treatment of the purchase by the trustee of the company's own bonds differs in no sense therefore from the purchase of bonds of other companies as far as the matter of accounting is concerned.

PROBLEMS

48. (From Massachusetts C. P. A. Examination, June, 1913.)

X, Y, Z, Corporation has an authorized issue of \$5,000,000 first mortgage 5 per cent. bonds, in \$1,000 denominations; \$2,502,000 of these are in the hands of the public, and the balance in escrow in the hands of trustees, to be taken down only to take up the bonds of underlying companies, or for new construction up to 80 per cent. of the expenditures; but the net earnings above operating expenses and taxes for the previous year must equal at least $1\frac{3}{4}$ times the interest on all outstanding bonds, including those to be taken down. The net earnings for a certain year were \$273,990.44. There were also in the hands of the public the following bonds of subsidiary companies: \$106,000 5s, and \$295,500 $4\frac{1}{2}$ s. The expenditures for construction amounted to \$300,000.

State how many bonds can be taken down for construction, showing how you arrive at the result.

49. (From Rhode Island C. P. A. Examination, December, 1907.)

An issue of \$250,000 fifty year bonds, dated July 1, 1904, is redeemable by a sinking fund into which annual cash instalments are to be paid by deposit of funds in a trust company which allows interest at the rate of 2 per cent. per annum, credited January 1 and July 1. Separate books are to be kept solely for recording and sinking fund operations. The fund so created is to be invested in interest-bearing securities, and the income therefrom is to be applied to the reduction of the succeeding annual instalments.

On July 1, 1905, the first instalment of \$5,000 was paid into the fund, and on the same day the following investments therefor were made:

Two 5 per cent. bonds of \$1,000 each April 1, and October 1, at par and accrued interest.

Two 6 per cent. bonds of \$1,000 each, May 1 and November 1, at \$110 and accrued interest.

On July 1, 1906, the second instalment was duly deposited to the credit of the fund, and on the same day the 5 per cent. bonds, purchased in the previous year were sold at 101 and accrued interest and other investments were purchased as follows:

(Two 6 per cent. bonds of the same issue as those purchased in the previous year at 105 and accrued interest.

Five 4 per cent. bonds of \$1,000 each, February 1 and August 1, at 98 and accrued interest.

The income from all investments was regularly received and deposited, and the value of the 6 per cent. bonds purchased in 1905 was written down to conform to the value of the bonds of the same issue purchased in 1906 at the same time of said letter purchase.

Frame journal entries and write up the sinking fund ledger accounts showing the amount of the cash instalments, payable on both July 1, 1906, and July 1, 1907, and the status of the sinking fund at said dates.

50. (From New York C. P. A. Examination, June, 1908.)

Highland county undertakes two public improvements, viz.: a road estimated to cost \$50,000, and a sewer estimated to cost \$40,000.

The work is to be paid for out of proceeds of county bonds falling due at various dates and redeemable from assessments levied against property presumably benefited, to the amount of the actual cost of the work and incidental charges when these are determined.

Bonds to the above amounts are accordingly sold, realizing a premium of 1 per cent., which is added to the respective funds; the cost of the two undertakings when completed is \$50,000 and \$40,500 respectively, for which assessments are accordingly levied.

Assessments are subsequently collected as follows: for roads \$30,200, with accrued interest of \$1,310; for sewers \$29,400, with accrued interest of \$1,250. The interest in each case goes into the related funds.

Road bonds of the par value of \$20,000 and sewer bonds of the par value of \$15,000 mature and are redeemed.

Frame journal entries, post to ledger accounts and prepare a trial balance from which the status of the county debt and of the funds and assessments at the conclusion of the above transactions can be ascertained and determined.

NOTES OF FOREGOING PROBLEM

TREATMENT OF ASSESSMENT ACCOUNTS

(From pages 58-60 of the "Handbook of Municipal Accounting," edited by the Bureau of Municipal Research and published by D. Appleton and Company.)

In considering the above problem, substitute the work "county" for "city."

Accounts relating to improvements which are assessable against property deemed benefited are included among the capital accounts because these improvements belong to the city and increase the capital surplus.

Stated in general terms, the theory of assessment accounts is that the city lays out money for improvements benefiting particular sections of the city and then levies assessments against the property benefited to recover the money so spent. In some cities the property owner deals with the contractor, the city merely acting as agent. In such cases, however, the improvement usually belongs to the city when completed.

Probably the most used method of financing these expenditures is to issue bonds, sometimes called assessment bonds. Outlays for the improvements are charged to a *local improvements in progress account* and when the improvement is completed, *assessments receivable*, representing accounts against individual owners of property benefited, is charged and the former account credited; at the same time an account with *permanent improvements* is charged and *capital surplus* is credited. Such an arrangement enables the city to carry on a large or small improvement as may be required.

In the case of improvements paid for out of bond funds care must be exercised to see that money recovered from property owners by the collection of assessments is applied to retire the bonds sold for the purpose or returned to the source from which it was obtained. This may be done by crediting collections, exclusive of interest and penalties, to *reserve for retirement of assessment bonds* and debiting *unapplied (not cash) balance* in the fund balance sheet (Exhibit 8). The money provided by the city to meet any deficiency in assessments or to pay assessments on city-owned property must also be credited to this reserve. When all assessments have been collected there will be just enough money represented by this reserve to pay off the bonds originally sold to raise funds for the assessable improvements. This illustrates another phase of the utility of the fund accounts and the fund balance sheet.

51. (From New York C. P. A. Examination, February, 1910.)

The Virginia Coal Co. was originated on January 1, 1906, began operations about January 7, 1906, and kept an ordinary set of books (by double entry) but did not close their accounts at the end of any fiscal year.

After an examination and verification of all accounts stated in the trial balance they are accepted as correct, except that termed "Sinking Fund Payments" (\$22,500).

The mortgage securing bonds to the amount of \$200,000 contains a sinking fund clause providing that the company shall deposit semi-annually with the Sinking Fund Trustee 5c. per ton on all coal mined; such payments shall be made to trustees during January and July of each year for the preceding six months' period. Money so deposited is to be applied, as soon as practicable, to purchase bonds at not exceeding 115 and accrued interest; compensation and expenses of trustee are also to be paid from the Sinking Fund. Bonds, when redeemed, can not be canceled but are to be held by trustee, who shall collect the semi-annual interest thereon, and apply to the same purpose as the 5c. per ton payments.

Bonds are dated January 1, 1906, run for 20 years and bear interest at 6 per cent. per annum, payable January 1 and July 1 of each year.

Payments to Sinking Fund Trustees (the General Trust Co.) have been as follows:

July 27, 1906—Payment for 6 mo. ended 6/30/06, 5c per ton on 120,000 tons.....	\$6,000
Jan. 24, 1907—Payment for 6 mo. ended 12/31/06, 5c per ton on 150,000 tons.....	7,500
July 28, 1907—Payment for 6 mo. ended 6/30/07, 5c per ton on 180,000 tons.....	9,000
	<hr/>
	\$22,500

On January 30, 1908, the Company paid to the General Trust Co. (S. F. Trustee) \$5,500 for Sinking Fund payment for the 6 mo. ended December 31, 1907, being 5c per ton on 110,000 tons.

The General Trust Co. submitted statements of receipts and disbursements for account of the Sinking Fund to date (January 31, 1908) as follows:

CASH RECEIVED TO DECEMBER 31, 1907

July 27, 1906—S. F. deposit for 6 mo. ended June 30, 1906, 120,000 tons at 5c.....	\$6,000
Jan. 5, 1907—Jan., 1907, coupons on 5 bonds.....	150
Jan. 24, 1907—S. F. deposit for 6 mo. ended Dec. 31, 1906, 150,000 tons at 5c.....	7,500
July 3, 1907—July, 1907, coupons on 12 bonds.....	360
July 28, 1907—S. F. deposit for 6 mo. ended June 30, 1907, 180,000 tons at 5c.....	9,000
	<hr/>
	\$23,010

CASH DISBURSEMENTS TO DECEMBER 31, 1907

Aug. 16, 1906—Bonds redeemed—5,000 at 110.....	\$5,500.00
Commission at ¼%.....	12.50
Accrued interest	37.50
	<hr/>
Feb. 15, 1907—Bonds redeemed—	\$5,550.00
4,000 at 108.....	\$4,320
2,000 at 110.....	2,200
1,000 at 112.....	1,120
	<hr/>
	\$7,640.00
Commission	17.50
Accrued interest	52.50
	<hr/>
	\$7,710.00
Aug. 12, 1907—Bonds redeemed—	
9,000 at 90.....	\$8,100
1,000 at par.....	1,000
	<hr/>
	\$9,100.00
Commission	250.00
Accrued interest	70.00
	<hr/>
	9,420.00
Dec. 31, 1907—Compensation of trustee.....	\$100.00
Advertising	50.00
	<hr/>
	150.00
	<hr/>
	\$22,830.00
Cash balance in hands of trustees Dec. 31, 1907.....	\$180.00
Received in January, 1908, viz.:	
S. F. deposit for 6 mo. ended Dec. 31, 1907, 110,000 tons at 5c.....	\$5,500.00
Jan., 1908, Coupons on 22 bonds in S. F.....	660.00
Interest allowed on balance to 12/31/08.....	100.00
	<hr/>
	6,260.00
	<hr/>
	\$6,440.00

Prepare entries to state properly on the books of the Virginia Coal Co. all Sinking Fund transactions.

52. (From Illinois C. P. A. Examination, May, 1914.)

The A. B. C. Estate Company was formed on January 1, 1912, and the following is the trial balance as at December 31, 1913, before closing the income and expenditure accounts for current year:

THE A. B. C. ESTATE COMPANY
TRIAL BALANCE—DECEMBER 31, 1913

	Dr.	Cr.
Capital stock authorized and issued.....		\$140,000.00
Bonds issued:		
120,000 20-year 5% bonds issued January 1, 1912 at a discount of 5%.....		120,000.00
Discount on bonds issued.....	\$6,000.00	
Property (Jan. 1, 1913).....	250,280.50	
Capital stock in treasury.....	12,000.00	
Calls unpaid	500.00	
Additions to property 1913:		
Sinking artesian well.....	5,000.00	
 A. B. C. Estate Co.:		
Bonds purchased 1912 (and canceled).....	\$6,000.00	
Bonds purchased 1913.....	6,000.00	
Rents collected		24,500.00
Fire insurance paid for year ending June 30, 1914.....	300.00	
Agents' fees and expenses.....	2,850.00	
General office expenses.....	1,050.00	
Cash at bankers and on hand.....	1,389.50	
Secretary's salary and commission.....	2,380.00	
Income and expenditure account 1912.....		14,250.00
Interest on bonds (paid annually).....	5,400.00	
	\$298,750.00	\$298,750.00

The rent collections include rents paid in advance, \$750.00, and there are sundry rents outstanding not taken up on the books, amounting to \$2,650.00, of which it is estimated \$15.00 will not be collected.

No provision has been made in the year's accounts for depreciation of the buildings, included in the property account, the original cost of which was \$120,000.00. In the year 1912 the amount written off was based on an estimated life of 20 years.

Prepare balance sheet as at December 31, 1913, and income and expenditure account for the year ended that date, after making the necessary adjustments.

53. (From Ohio C. P. A. Examination, November, 1914.)

A syndicate organized for the purpose of financing the construction of a railroad, advised the subscribers that upon the further payment of \$340 per each \$1,000 originally subscribed and theretofore paid in, it would be able to retire the railroad company's note for \$400,000.00, release the railroad company's bonds which had been pledged as collateral security thereto, and distribute to the subscribers, in liquidation of the syndicate, \$680.00 par of bonds (being the entire bond issue) and \$780.00 par of stock of the railroad company for each \$1,000.00 originally subscribed, and that the balance of the railroad company's stock had been used, at par, to pay for right of way, construction and equipment (including organization and other preliminary expenses) and to provide working capital (in cash) amounting to \$50,000.00; also that the real estate owned by the railroad company was valued at an amount equal to its bonded indebtedness, which latter bore the relation of four to five of its issued stock. All original subscriptions and the above mentioned additional call have been paid in, the railroad company's note paid off and the syndicate liquidated.

(No attention need be paid to factors not mentioned in the problem, and the use of cents may be avoided by using amounts rounded off at the nearest dollar.)

- a. Prepare a balance sheet of the railroad company.
- b. Prepare summary opening, running and closing entries on the syndicate's journal, cash book and ledger.
- c. Attach your working papers showing the calculations made in solving the problem.

54. (From Pennsylvania C. P. A. Examination, November, 1912.)

A company issues \$1,000.00 bonds (denomination \$1,000.00 each), dated January 1, 1910, bearing interest at 5 per cent. and maturing January 1, 1920. These bonds were sold at 80 per cent. of their par value.

The mortgage provides for a sinking fund to be created by annual payments of \$50,000.00, and at December 31, 1911, the balance sheet of the company, among other items, shows the following, which relate to these transactions:

Discount on bonds.....	debit,	\$160,000.00
Trustee of sinking fund.....	debit,	102,000.00
First mortgage bonds.....	credit,	1,000,000.00

On January 1, 1912, the trustee purchased 113 bonds out of the funds in his possession at \$900.00 each, which were canceled.

State what entries should be made in respect to these transactions; also give your views as to the proper treatment of discount on bonds, both as to when they are purchased and canceled, as in the foregoing, and when they are not redeemed until maturity.

55. By the terms of a sinking fund agreement the trustee collects from the Railway Company, semi-annually, on the 1st day of January and July, the interest on the bonds in the sinking fund, together with the sinking fund payment.

If it cannot purchase sufficient bonds at par and accrued interest in the open market to absorb the moneys in the sinking fund it draws sufficient bonds by lot, ten days prior to February 1st and August 1st of each year at par flat so as to invest all of the moneys in its hands.

The interest on these drawn bonds ceases to the public on the first coupon date after they are drawn.

The bonds are held alive in the sinking fund and interest on the same is collected by the trustee and is used with the semi-annual sinking fund payments to retire additional bonds.

The first statement of account is that rendered by the trustee to the assistant treasurer of the Railway Company, who checks it up and renders the second statement of account to the treasurer of the Railway Company to be taken into the accounts.

Reconcile the two statements of account.

Susquehanna Railway Company

In Account With

The Southwestern Trust Company, Trustee, under Sinking Fund Agreement dated January 1, 1880, for Northern Division 4% Bonds maturing 1930.

1915	DR.		
Jan. 15	Bought \$10,000 No. Div. 4% Bonds at 99½.....	\$9,950.00	
	Accrued Interest	182.22	
			\$10,132.22
Jan. 26	Paid \$100 drawn bond and coupon.....		102.00
Feb. 1	" \$95,100 drawn bonds and coupons.....		95,202.00
Feb. 2	" \$10,000 drawn bonds.....		10,000.00
Feb. 4	" \$2,200 drawn bonds and coupons.....		2,202.00
Feb. 5	" Balance		12,796.06
			<hr/>
			\$130,434.28

1914	CR.	
Dec. 31	Balance as per account rendered.....	\$3,540.28
1915		
Jan. 1	Received semi-annual payment to the sinking fund	40,000.00
Jan. 1	Collected six months interest to February 1, 1915, on \$4,329,500 Northern Division 4% Bonds	86,590.00
Jan. 27	Collected coupon paid with drawn bond.....	2.00
Feb. 1	Collected six months interest to date on \$10,000 Northern Division 4% Bonds purchased in January.....	200.00
Feb. 3	Collected coupons paid with drawn bonds.....	102.00
		<hr/>
		\$130,434.28
Feb. 5	Balance	<hr/>
		\$12,796.06

DRAWN BONDS NOT YET PRESENTED FOR PAYMENT:

No. 286 for \$1,000 and Nos. 016, 0288, 0354 for \$100 each, on which interest ceased February 1, 1914.
 Nos. 259, 456 for \$1,000 each and No. 07 for \$100, on which interest ceased August 1, 1914.
 Nos. 38, 96, 102, 157, 966, 988, 1655, 4299, 4300 for \$1,000 each, and Nos. 015, 019, 026, 0100 for \$100 each, on which interest ceased February 1, 1915.

2

The Southwestern Trust Company, Trustee, under Sinking Fund Agreement dated January 1, 1880, for Northern Division 4% Bonds maturing 1930.

In Account With Susquehanna Railway Company

1914	DR.	
Dec. 31.	Balance as per account rendered.....	\$66.28
1915		
Jan. 1	Paid semi-annual payment to sinking fund.....	40,000.00
Jan. 1	Six months interest to Feb. 1, 1915, on \$4,332,900 Northern Division 4% Bonds...	86,658.00
Feb. 1	Paid six months interest to date on bonds purchased in January.....	200.00
		<hr/>
		\$126,924.28
Feb. 5	Balance	<hr/>
		\$92.06

1915	CR.	
Jan. 15	Bought \$10,000 No. Div. 4% Bonds at 99½	\$9,950.00
	Accrued Interest	182.22
		<hr/>
		\$10,132.22
Feb. 1	\$116,700 Northern Division Bonds drawn for payment this day at par.....	116,700.00
Feb. 5	Balance	92.06
		<hr/>
		\$126,924.28

SINKING FUND BONDS

\$4,459,600 Northern Division 4% Bonds

56. (From New York C. P. A. Examination January, 1906.)

A corporation issues \$100,000 in 20-year bonds, dated January 1, 1902, redeemable out of revenue by means of 20 annual sinking fund instalments of \$5,000 each. December 31, 1902, \$5,000 is reserved out of profits and placed to the credit of Reserve for Redemption and \$5,000 is deposited in a trust company at 2% and charged to Sinking Fund for Redemption. Separate sinking fund books are opened in the ledger in which Cash is charged and Sinking Fund credited with said first instalment.

February 2, 1903, investments are purchased for the sinking fund and the principal thereof is charged on the sinking fund books to separate investment accounts, while the accrued interest is charged to Revenue from Investments.

The investments so purchased are as follows:

- a. Two (2) 5% gold bonds, due 1950, at \$1,000 each, interest payable May 1, Nov. 2, at par and accrued interest.
- b. One (1) 6% gold bond, due 1940, of \$1,000, April 1, Oct. 1, at 120 and accrued interest.
- c. The company loans on first mortgage \$1,400 at 5% interest, payable Aug. 1, Feb. 1.

The interest is regularly received and deposited in the special account, charged to Cash and credited to Revenue from Investments, which latter account is in turn closed by transfer of balance to Sinking Fund for Redemption.

December 31, 1903, the second annual reserve is made in the amount of \$5,000, less the net income of the sinking fund for the expired current year as shown by the sinking fund books, and a corresponding deposit is made in the special fund, while the proper entries of the receipt thereof are also made and posted in the sinking fund books. March 1, 1904, two (2) 6% bonds of the same issue as purchased in the previous year are bought for the sinking fund at 116 and accrued interest, and one (1) of the 5% bonds is sold at 103 and accrued interest, and a first mortgage for \$3,500 at 5% March 1 and Sept. 1 is purchased. The 6% bond bought in 1903 and held at 120 is written down to 116, and the remaining 5% bond held at par is written up to 103 by cross entry between the principal account and the Revenue from Investments account.

December 31, 1904, the third instalment is reserved and deposited in the same manner and on the same principle as the preceding ones.

Frame the necessary journal entries on both the general and the sinking fund book to give expression to the foregoing transactions; also the accounts affected in both ledgers showing the status of sinking fund at the beginning of 1905.

57. (From Massachusetts C. P. A. Examination, October, 1916.)

Prepare a balance sheet at June 30, 1916, from the following data:

The X. Y. Z. Company was incorporated January 1, 1914, with 5,000 shares of stock having no par value, \$200,000 was paid into the company for which 3,000 shares of stock were issued, 2,000 shares and \$50,000 were given for water-power rights and land valued at \$150,000, and \$100,000 was expended in constructing and equipping an electric power plant which started operation July 1, 1914. Organization expenses were \$2,000. Salaries and office expenses up to July 1, 1914, were \$10,000.

After operating a few months it was decided to build an additional power plant, to finance which \$200,000 par value 1st mortgage 5% 20-year bonds (interest semi-annually) were issued in denominations of \$500 and \$1,000 and sold at 98 on January 1, 1915. The construction expenditures for the new plant were \$175,000 and it was completed and put into operation July 1, 1915.

The mortgage deed of trust provides that a sinking fund of \$5,000 be set aside on December 31st of each year out of profits for the first ten years and \$15,000 per year thereafter with which to retire bonds at 101 each year. The two power plants have been depreciated at the rate of 5% per annum on the cost, starting from the date when operations commenced. The gross earnings from July 1, 1914, to June 30, 1916, were \$85,000, of which \$45,000 was collected, and the operating costs paid, exclusive of depreciation, were \$40,000.

58. (From Massachusetts C. P. A. Examination, October, 1916.)

A corporation authorized a total issue of \$500,000 of 5% bonds in denomination of \$1,000 and \$500 with interest payable January 1st each year, and sold the whole issue to underwriters January 1, 1914, at 90. The company issued the bonds for the underwriters at 95 and received the cash in payment February 1, 1914.

The trust deed provides that "there shall be established a fund to be called The Bond Sinking Fund, to the account of which there shall on the 31st day of December of each year be carried a sum equal to seven per cent. of the total par value of the Bonds issued, and that, out of the moneys so carried to the account of the said fund, the company shall pay the interest on the bonds as the same become due, and the balance of said moneys shall be expended each year in purchasing the bonds of the company in the open market."

In January, 1915, the company purchased \$10,000 of its bonds at 97 and retired and canceled them. In January, 1916, the market price of the bonds is 98.

- a. How many bonds may be purchased from the Bond Sinking Fund in January, 1916?
- b. Make journal entries for all the transactions from the date of the sale of the bonds to and including the purchase for the Sinking Fund in January, 1916.
- c. Show trial balance after posting above entries.

PART V

RECEIVERSHIPS AND BANKRUPTCY

In actual practice, the accounting problems which arise in connection with receiverships and bankruptcy introduce no principles that are essentially new. Unless there are complications due to the manner in which the accounts have been kept prior to the receivership or bankruptcy, or unless fraud is suspected, accountants are seldom consulted in such cases. The accounting work connected with winding up the affairs of the business will usually be attended to in the office of the receiver, who is generally a lawyer, or of the referee in bankruptcy. In bankruptcy a balance sheet would be submitted to the referee prepared from the books of the company. The assets are then appraised and the creditors are required to prove their claims. Subsequent thereto the accounting work consists simply of recording the conversion of the assets into cash and the liquidation of the claims of the creditors.

The matter is not quite so simple in the case of a receivership, as it then usually becomes necessary for the receiver to assume complete control of the company and in such capacity he is responsible for the administration of all its affairs. The object of a receivership is to avert bankruptcy if possible. A company finds itself financially embarrassed but has reason to feel that the difficulty is only temporary or is due to the inefficiency of its present management. The company in such cases may ask for a friendly receiver or creditors may force a receivership in order that the management may be placed in other hands in the hope that the business may be helped out of its difficulty and placed on a sound financial basis. In such cases, there would usually be no outward change apparent. The business would be continued in the same manner and the accounting system would undergo no change, unless it be deemed advisable to close out the old books and transfer the accounts to a new set of books to be kept during the receivership.

While the actual accounting involved in such cases presents no particular difficulties, as we have seen, there has been forced upon students of accounting certain highly technical financial statements purporting to be associated with the accounts of receivership and bankruptcy. These are known as a Statement of Affairs, Deficiency Statement and a Realization and Liquidation Account. Boards of Examiners for Certified Public Accountants in the various states have probably set more practical problems requiring the preparation of one or more of these statements than they have on any other one phase of accounting. Such problems may be as good as any others as a test of the reasoning powers of a candidate but as no practical reason exists in this country for such problems they may be regarded as essentially impractical and therefore of little importance. It can only be assumed that the reason for the popularity of such problems among examining boards is that they serve as a never-failing stumbling block to candidates.

The problems are distinctly English in their character and the technical statements required are copied after those used by English and Scotch accountants. From an academic standpoint, however, it can be said in favor of the problems that they are usually interesting and require clear analysis and intelligent work on the part of the student, and so long as boards of examiners make use of them it is hardly wise to ignore them in a course dealing with practical accounting problems.

Statement of Affairs

As noted above, this statement originated in England where it is necessary within a certain number of days "following the appointment of an Official Receiver for the debtor to lodge with the Receiver a Statement of Affairs." This must be prepared on an official form, as in the case of our own executors' or trustees' accounts, for example.

The statement is an estimate of the amount which the assets of the business will yield as a result of enforced liquidation. Such a statement does not of course arrive at any final conclusions but gives a more or less definite basis of action. In form, it closely resembles a balance sheet with an additional column running parallel with the asset items headed "Expected to Realize," and another column parallel with the liabilities headed "Expected to Rank."

The asset side of the statement shows the assets in the anticipated order of their realization.

The liability side shows the liabilities usually classified as follows:

1. Unsecured claims.
2. Partly secured claims.
3. Fully secured claims.
4. Preferred claims.

"Preferred Claims" relates to those claims for debts and expenses which must be paid in advance of the claims of regular creditors. They consist of the following:

1. Taxes legally due and owing to the United States, state, county or municipality.
2. Expenses incurred in the proper administration of the estate, including reasonable fees of attorney and receiver.
3. Wages due for services performed within three months of the filing of the petition, but not to exceed \$300 in the case of a single employee.
4. Filing fees paid by creditors in involuntary bankruptcy.

The following points should be observed in preparation of the statement:

1. Fully secured claims should be deducted from the assets given as security.
2. Pledged assets should be deducted from partly secured claims.
3. The preferred claims should be deducted from the remainder of the appraised value of the assets as shown by the "Estimated to Realize" column.
4. The balance shown by the difference between the totals of the "Expected to Rank" and the "Expected to Realize" columns would represent the Deficiency, if the former column exceeds the latter; otherwise a Surplus.
5. Reserve accounts may be shown as a deduction from the assets to which they are related or treated as a part of the surplus and deducted from the estimated losses anticipated from liquidation.

Deficiency Statement

This statement which is supplementary to the statement of affairs shows the causes leading up to the deficiency of assets. This statement may be said to bear the same relation to a profit and loss statement prepared from the books as the statement of affairs bears to a balance sheet. The statement of affairs shows the extent of the financial embarrassment; the deficiency statement explains the causes of such embarrassment. The statement is begun by showing the net worth of the business. Insolvency means that the liabilities of the business must exceed the assets. The estimated shrinkage in assets must therefore exceed the net worth as shown by the capital accounts or by the capital stock plus the surplus, before the business can be regarded as literally insolvent, or before the statement would show a deficiency. However, where the business is not actually insolvent the deficiency statement could still be prepared showing the impairment of capital as a result of the anticipated shrinkage due to liquidation.

Realization and Liquidation Account

This account called for by numerous C. P. A. problems like the two statements previously explained is purely theoretical as far as the work of the American accountant is concerned. An understanding of the account, however, emphasizes the principles involved inclosing out the ledger accounts of a business and provides material for testing the reasoning powers of the student as well. As Esquerre well says in his "Applied Theory of Accounts," such a statement "requires less ingenuity than belief in the truth of accounting principles and ability to handle delicate accounting mechanisms. In fact, the Realization and Liquidation account is practically a copy of the transactions incident to the liquidation so arranged as to make it possible for a reader not wholly deficient in accounting knowledge to perceive at a glance the nature of the closing operations. If the statement is adequately prepared, one must be able to single out any asset, ascertain its original amount, its increase during liquidation, the proceeds of its sale, and the gain or loss made on its realization."

The Statement of Affairs is an estimate prepared by the receiver or trustee in bankruptcy of what he thinks will probably be realized from the assets that are turned over to him and showing what the unsecured creditors may expect in settlement. The Realization and Liquidation account, on the other hand, shows what he has actually accomplished.

The function of the account may be stated as follows:

REALIZATION AND LIQUIDATION

DR.	CR.
a. With all assets to be realized. (Cash does not need to be included.)	a. With all liabilities to be liquidated. (Net Worth not included.)
b. With all liabilities liquidated.	b. With all assets realized.
c. With all liabilities not liquidated.	c. With all assets not realized.
d. With all payments made in addition to liabilities liquidated. (Often spoken of as Supplementary Charges.)	d. With all credits arising from sales, discounts, etc. (Often spoken of as Supplementary Credits.)

The balance of the account shows a loss on Realization and Liquidation if the debit side is the larger and a gain if the credit side is larger.

The following problems and their solutions illustrate the principles that are involved and provide models which may be followed in preparing the assigned work.

PROBLEM A

(From New York C. P. A. Examination, October, 1907.)

The Nassau Engineering Company fails and a receiver is appointed on March 1, 1907, who on taking charge finds the company's liabilities and assets to be as follows: Creditors, unsecured, \$59,000; partly secured, \$16,500; fully secured, \$13,500. The company owns real estate \$15,000 which is mortgaged for \$10,000; machinery and tools, \$30,000; materials, \$3,000, and book debts, \$9,000, including \$2,500 in litigation on which a loss of 50% is expected; also securities of the value of \$22,500 acquired in settlements, of which \$7,500 are pledged with partly secured creditors and \$14,000 with fully secured creditors. There are engineering contracts in force to the amount of \$60,000 on which \$45,000 has been expended. Cash in bank, \$750. The capital stock of the company is \$75,000, and the accumulated losses on contracts, bad debts written off and expenses show a deficiency of \$18,850. Customers' bills have been discounted to the amount of \$4,500, of which \$1,500 will be dishonored in consequence of failure of obligor. The machinery and tools are expected to realize only 50% of the book value, and the real estate is appraised at \$12,000. The cost to complete contracts is estimated at \$30,000 by the sureties who offer \$2,250 for the stock of materials on hand. Unpaid taxes and assessments amounting to \$216 are discovered but no entry thereof appears in the company's books.

Prepare a statement of affairs and deficiency account in technical form.

NASSAU ENGINEERING COMPANY
STATEMENT OF AFFAIRS, MARCH, 1, 1907.

	ASSETS	Expected to	
		Book Value	Realize
Cash		\$750.00	\$750.00
Accounts Receivable		9,000.00	7,750.00
(\$2,500 in liquidation on which a loss of 50% is expected)			
Securities Owned		22,500.00	
Less:			
\$14,000 pledged with fully secured creditors having claims of.....	\$13,500		
Pledged with partly secured creditors	7,500		
			1,500.00
Materials		3,000.00	2,250.00
Engineering Contracts		45,000.00	
Contract price	\$60,000		
Less:			
Estimated cost to complete.....	30,000		
			30,000.00
Real Estate		15,000.00	
Appraised value	\$12,000		
Less:			
Mortgage as per contra.....	10,000		
			2,000.00
Machinery and Tools.....		30,000.00	15,000.00
Total		\$125,250.00	\$59,250.00
Deduct:			
Preferred Claims:			
Unpaid Taxes and Assessments.....			216.00
Balance available for unsecured creditors.....			\$59,034.00
Deficiency			10,566.00
			\$69,600.00
LIABILITIES		As per	Expected
		Books	to Rank
Unsecured Claims:			
Accounts Payable		\$59,100.00	\$59,100.00
Notes Receivable Discounted.....			1,500.00
Partly Secured Claims:			
Accounts Payable		16,500.00	9,000.00
Fully Secured Claims:			
Mortgage Payable		10,000.00	
Accounts Payable		13,500.00	
(Deducted as per contra)			
Preferred Claims:			
Unpaid Taxes and Assessments			
(Not shown on books. Deducted as per contra)			
Total Liabilities as per Books.....		99,100.00	
Total Unsecured Claims			69,600.00
			\$69,600.00

NASSAU ENGINEERING COMPANY
DEFICIENCY STATEMENT, MARCH 1, 1907

Net Worth:			
Capital Stock		\$75,000.00	
Deduct:			
Debit Balance to Profit and Loss.....	\$18,850		
Expenses and losses not on Books:			
Taxes and assessments.....	\$216		
Less due to endorsement of discounted note.....	1,500		
		<u>1,716</u>	
			<u>50,566.00</u>
			\$24,434.00
Anticipated Losses in Liquidation:			
Shrinkage in Assets:			
Real Estate	\$3,000		
Machinery and Tools.....	15,000		
Materials	750		
Accounts Receivable	1,250		
		<u>20,000.00</u>	
Losses on Uncompleted Contracts.....		15,000.00	
			<u>35,000.00</u>
Deficiency (Excess of Anticipated Losses over Net Worth)			\$10,566.00

PROBLEM B

(From New York C. P. A. Examination, June, 1907.)

The Fox & Dix Company, a close corporation, became embarrassed through the failure of a friendly company to whom they had given their accommodation paper, and a trustee was appointed February 1, 1906, to take charge of their affairs for the benefit of the creditors.

The condition of the Estate, when the trustee took charge, was as follows:

LIABILITIES

Mortgage on real estate, maturing Feb. 1, 1907	\$15,000.00
Interest, due Feb. 1, 1906, six months at 5%	375.00
Taxes due	210.00
Book accounts payable.....	3,900.00
Bills payable (including accommodation paper, \$56,000.00)	57,400.00
Capital stock	40,000.00
Surplus, per profit and loss account.....	3,987.00
	<u>\$120,872.00</u>

ASSETS

Cash on hand and in bank.....	\$650.00
Merchandise (stock of goods).....	25,310.00
Book debts (including accommodation account, \$56,000.00)	60,800.00
Bills Receivable	4,112.00
Real Estate	30,000.00
	<u>\$120,872.00</u>

In order to complete contracts and so realize to the best advantage on the goods in stock, the trustee purchased merchandise to the amount of \$50,000, and during the year collected \$100,002 cash from sales.

The accommodation account was settled for 60%. The other book debts realized \$4,100, and the bills receivable \$3,600. Balance lost.

The accommodation paper was settled by paying \$40,000 cash and renewing \$16,000, entailing legal fees, interest, and petty expenses of \$2,200.

The other bills payable, the accounts payable, taxes and interest on mortgage for eighteen months, were paid in course of settlement, and the principal of the mortgage was paid off at maturity.

The running expenses were as follows: Clerk hire, \$1,500; office expenses, \$1,000; allowances to officers, \$3,000; trustee's commissions, \$3,000.

On February 1, 1907, the trustee surrendered charge of the company's offices and paid over the cash balance in his hands. On said date there were also uncollected book debts \$2,000, and merchandise stock \$8,000.

Prepare a realization and liquidation account, a trustee's cash account and a balance sheet of the estate at termination of trust.

FOX AND DIX COMPANY ENTRIES ON GENERAL BOOKS

February 1, 1906

Trustee	\$650	
To Cash		\$650
To charge trustee for cash turned over to him.		
Trustee	120,222	
To Merchandise		25,310
Accommodation Account		56,000
Accounts Receivable		4,800
Bills Receivable		4,112
Real Estate		30,000
To charge the trustee for assets turned over to him.		
Mortgage Payable	15,000	
Interest Accrued on Mortgage	375	
Accounts Payable	3,900	
Accommodation Paper	56,000	
Bills Payable	1,400	
Taxes Accrued	210	
To Trustee		76,885
To credit the trustee for the liabilities accrued by him.		

February 1, 1907

Cash	19,617	
To Trustee		19,617
To credit trustee for balance of cash on hand at close of trusteeship as per Trustee's Cash Account.		
Accounts Receivable	2,000	
Merchandise	8,000	
Real Estate	30,000	
To Trustee		40,000
To credit trustee for the assets not realized as per Realization and Liquidation Statement.		
Trustee	16,000	
To Bills Payable		16,000
To charge the trustee for liability not liquidated as per Realization and Liquidation Statement.		
Profit and Loss	370	
To Trustee		370
To credit the Trustee for the net loss sustained during the trusteeship.		
Surplus	370	
To Profit and Loss		370

ENTRIES ON TRUSTEE'S BOOKS

February 1, 1906

Cash	\$650	
To Fox and Dix Company.....		\$ 650
To credit Fox and Dix Company for cash turned over by them.		
Merchandise	25,310	
Accommodation Account	56,000	
Accounts Receivable	4,800	
Bills Receivable	4,112	
Real Estate	30,000	
To Fox and Dix Company.....		120,222
To credit Fox and Dix Company for assets turned over by them.		
Fox and Dix Company.....	76,885	
To Mortgage Payable		15,000
Interest Accrued on Mortgage.....		375
Accounts Payable		3,900
Accommodation Paper		56,000
Bills Payable		1,400
Taxes Accrued		210
To charge Fox and Dix Company for liabilities to be liquidated.		

ENTRIES DURING PERIOD OF TRUSTEESHIP

Merchandise	\$50,000	
To Cash		\$50,000
Merchandise purchased in order to complete contracts and so realize on goods in stock to the best advantage.		
Cash	100,002	
Accounts Receivable	2,000	
To Merchandise		102,002
Sales made by trustee.		
Cash	33,600	
To Accommodation Account		33,600
Accommodation Account settled for 60 cents on the dollar.		
Cash	7,700	
To Accounts Receivable		4,100
Bills Receivable		3,600
Amounts collected on assets.		
Accommodation Paper	56,000	
To Cash		40,000
Bills Payable		16,000
Accommodation paper settled by paying \$10,000 in cash in renewing \$16,000.		
Trustee's Expenses	2,200	
To Cash		2,200
Expenses incidental to settling accommodation paper.		
Bills Payable	1,400	
Accounts Payable	3,900	
Taxes Accrued	210	
Interest Accrued on Mortgage.....	375	
Interest on Mortgage.....	750	
To Cash		6,635
Cash paid in settlement of liabilities.		
Mortgage Payable	15,000	
To Cash		15,000
Cash paid in settlement of mortgage.		
Trustee's Expenses	8,500	
To Cash		8,500
Clerk hire	\$1,500	
Office expenses	1,000	
Allowances to officers.....	3,000	
Trustee's commissions	3,000	
	<hr/>	
	\$8,500	

February 1, 1907

Fox and Dix Company.....	40,000	
To Accounts Receivable.....		2,000
Merchandise		8,000
Real Estate		30,000
To charge assets on hand at end of trusteeship to Fox and Dix Company.		
Fox and Dix Company	19,617	
To Cash		19,617
Cash turned back to Fox and Dix Company at end of trusteeship.		
Bills Payable	16,000	
To Fox and Dix Company.....		16,000
To credit Fox and Dix Company for liability not liquidated.		
Merchandise	34,692	
To Trustee's Profit and Loss.....		34,692
Gross profit on sale of merchandise.		
Trustee's Profit and Loss.....	23,612	
To Accommodation Account.....		22,400
Accounts Receivable		700
Bills Receivable		512
To close losses sustained in realizing on assets into Profit and Loss account.		
Trustee's Profit and Loss.....	11,450	
To Trustee's Expenses.....		10,700
Interest on Mortgage.....		750
To close the expenses incurred during the trusteeship.		
Fox and Dix Company.....	370	
To Trustee's Profit and Loss.....		370
To charge Fox and Dix Company for the net loss sustained during the trusteeship.		

FOX AND DIX COMPANY
REALIZATION AND LIQUIDATION ACCOUNT

February 1, 1907

ASSETS TO BE REALIZED:

Merchandise	\$25,310	
Accommodation account	56,000	
Accounts receivable	4,800	
Bills receivable	4,112	
Real estate	30,000	
		<hr/>
		\$120,222

NEW ASSETS ACQUIRED DURING TRUSTEESHIP:

Merchandise purchased	50,000	
Accounts receivable (charge sales).....	2,000	
		<hr/>
		52,000

TOTAL ASSETS		<hr/>
		\$172,222

LIABILITIES LIQUIDATED:

Mortgage payable	15,000	
Interest accrued on mortgage (six months to Feb. 1, 1906)	375	
Accounts payable	3,900	
Accommodation paper	40,000	
Bills payable	1,400	
Taxes accrued to Feb. 1, 1906.....	210	
		<hr/>
		60,885

LIABILITIES NOT LIQUIDATED:

Bills payable	16,000
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TRUSTEE'S EXPENSES:

Expenses of settling accommodation paper.....	2,200	
Clerk hire	1,500	
Office expenses	1,000	
Allowances to officers	3,000	
Trustees' commissions	3,000	
		<hr/>
		10,700

SUPPLEMENTARY CHARGED:

Interest on mortgage (one year to Feb. 1, 1907)	750	
		<hr/>
		260,557

LIABILITIES TO BE LIQUIDATED:

Mortgage Payable	15,000
Interest accrued on mortgage.....	375
Accounts payable	3,900
Accommodation paper	56,000
Bills payable	1,400
Taxes accrued	210
	<hr/>

TOTAL LIABILITIES	76,885
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ASSETS REALIZED:

Merchandise	102,002	
Accommodation account	33,600	
Accounts receivable	4,100	
Bills receivable	3,600	
		<hr/>
		143,302

ASSETS NOT REALIZED:

Merchandise	8,000	
Accounts receivable	2,000	
Real estate	30,000	
		<hr/>
		40,000

NET LOSS INCURRED DURING TRUSTEESHIP	370
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\$260,557

(The Cash account and Balance Sheet asked for in the problem are not given as they present no difficulties.)

PROBLEMS

59. The John Smith Company finds itself in financial difficulties and the proper legal proceedings having been followed, a trustee is appointed to take charge of the affairs of the concern. The following trial balance was taken from the books on October 1, 1916:

JOHN SMITH COMPANY
TRIAL BALANCE—OCTOBER 1, 1916

Cash on Hand.....	\$30	Accounts Payable	\$8,000
Cash in Bank.....	250	Notes Payable	2,000
Merchandise	1,300	Loan Payable	1,300
Accounts Receivable	5,850	Notes Receivable Disct.....	1,500
Machinery	3,000	Mortgage Payable	7,000
Real Estate	12,000	Wages Accrued	150
Securities Owned	1,500	Taxes Accrued	60
Deficit	1,080	Capital Stock	5,000
	<u>\$25,010</u>		<u>\$25,010</u>

Of the items listed above, it is estimated that the merchandise on hand will sell for \$950; of the accounts receivable \$4,000 are thought to be good, \$1,200 bad, and \$650 doubtful of collection, and it is estimated that about \$4,100 will be collected; the machinery will bring \$1,000 at forced sale; the real estate is appraised at \$9,000 and is mortgaged for \$7,000; the securities owned have a market value of \$1,000 and are pledged as collateral for a loan made to the company amounting to \$1,300.

In order to realize on the merchandise on hand to the best advantage the trustee made purchases amounting to \$3,500, of which \$1,500 was for cash, and the entire stock of merchandise was disposed of for \$4,350. The trustee collected \$4,400 on accounts receivable. The machinery was sold for \$1,000. The real estate was sold for \$9,500, of which \$7,060 went to the mortgages for principal and interest. The securities were sold for \$1,035.

The payments made by trustee on account of expenses were as follows: Wages, \$760; taxes, \$60; office expenses, \$350; trustee's commissions, \$250.

Interest on cash on deposit was allowed, \$15.00. After the liquidating expenses and preferred claims had been paid, the cash remaining in the business was distributed among the unsecured creditors in the proper proportion.

The outstanding stock certificates are then canceled and the affairs of the company permanently closed. Prepare Realization and Liquidation account and Trustee's cash account.

60. (From Examination for Admittance to the American Institute of Accountants, June, 1917.)

BALANCE SHEET OF AB

Real estate	\$140,000.00	Capital	\$229,652.00
Equipments	75,150.00	Mortgages on real estate.....	75,000.00
Patents	54,700.00	Accounts payable	124,615.24
Investments	33,500.00	Notes payable	80,000.00
Cash	4,348.64	Reserve for depreciation.....	821.00
Notes receivable	2,479.75		
Accounts receivable	31,108.15		
Inventories	81,423.70		
Good will	40,000.00		
Trading losses	47,378.00		
	<u>\$510,088.24</u>		<u>\$510,088.24</u>

AB, whose balance sheet appears above, having been unfortunate in business, goes into liquidation. Prepare statement of affairs and deficiency account.

The real estate is valued at \$90,000, the equipment at \$30,000. The patents are considered worthless, with the exception of one thought to have a market value of \$5,000. Bonds, with a par value of \$27,500, were pledged to secure a collateral loan of \$25,000. These have, however, shrunk in value so as to be worth at present prices only \$22,000. Included in investments are \$5,000 other bonds which are clearly worthless; the other investments have a doubtful value of 50 per cent. The notes receivable are thought to be good. Of the accounts receivable \$10,000 are known to be good, \$5,000 are known to be bad, and the remainder are expected to pay 80 per cent. The inventories are estimated as worth not more than half of their book value. Goodwill is purely fictitious. Interest accrued on the mortgage is \$800, on notes payable, \$523. Wages accrued are \$1,200.

Assuming the foregoing estimates of value are correct and the expenses of liquidation amount to \$3,000, what percentage of their claims will the general creditors receive?

61. (From Massachusetts C. P. A. Examination, October, 1915.)

The accounts of a partnership include:

Cash	\$1,400.00
Merchandise	15,000.00
Accounts Receivable	20,000.00
Notes Receivable	4,000.00
Machinery	7,000.00
Real Estate	5,000.00
Investments	2,500.00
Mortgage Payable on Real Estate.....	3,000.00
Notes Payable	16,000.00
Accounts Payable	35,000.00
Taxes Due	500.00
Wages Due	1,000.00
Rent Due	700.00
Notes Receivable Discounted.....	3,000.00
Partners' Accounts	12,000.00

All the investments are pledged as collateral on \$1,500. Notes Payable. Of the Accounts Receivable \$1,000 are considered bad, \$2,500 doubtful and worth 50% of book value, and the balance good. Real Estate is undervalued 10%. Merchandise is subject to a discount of 25%. Machinery is overvalued 25%. \$2,000 Notes Receivable Discounted has been paid by makers. Expense of liquidation estimated to amount to \$1,500. The partners have personal estates valued at \$4,000.

Prepare such statements as seem desirable under the circumstances, and state probable amount for distribution among creditors.

62. (From New York C. P. A. Examination, January, 1902.)

John Thompson exhibits the following balance sheet of his business, dated June 30, 1900:

Cash	\$750	Sundry creditors	\$6,000
Book debts	9,500	Bills payable	7,500
Stock on hand	6,500	Bank (overdraft)	3,000
Fixtures, etc.	1,750	Balance	2,000
	<u>\$18,500</u>		<u>\$18,500</u>

On questioning Thompson it was found that he had omitted the following from his balance sheet: \$250 owing for rent; \$75 owing for taxes; \$2,500 borrowed at 5% from his wife three years ago, no payment having been made on account of either principal or interest; a draft for \$500 accepted by a firm without consideration, falling due in 30 days. His private and household debts amounted to \$600.

The item entered on his balance sheet as cash included his personal I. O. U. for \$600.

Of the book debts about \$3,500 might be considered bad and the rest good. The stock was good except \$1,000 which would not produce more than \$100. The fixtures, if sold, would not realize more than \$250. The only other assets were household furniture worth about \$1,250 and residence valued at \$7,500 subject to a first mortgage for \$5,000 at 4%, and also a second mortgage held by his bank as security for overdraft.

Prepare a statement of affairs and deficiency account.

63. (From Ohio C. P. A. Examination, November, 1913.)

The firm of Smith & Jones, of Columbus, Ohio, a partnership, was forced into bankruptcy. To protect creditors, each of the partners has also filed a voluntary petition in bankruptcy.

A trial balance taken from the firm books at October 31, 1913, is as follows:

John Smith		\$35,000.00	
William Jones		45,000.00	
Cash	\$875.00		
Land	10,000.00		
Buildings	30,500.00		
Machinery, Tools, etc.	35,000.00		
Furniture and Fixtures	1,500.00		
Horses and Wagons	2,350.00		
Accounts Receivable	58,900.00		
Notes Receivable	18,700.00		
Mortgage Payable (Real Estate)		25,000.00	
Accounts Payable		105,250.00	
Notes Payable		42,500.00	
Merchandise (Inventory 1/1/13)	59,725.00		
Sales		516,875.00	
Purchases	196,375.00		
Productive Labor	130,500.00		
Manufacturing Expenses	125,000.00		
Selling Expenses	70,500.00		
Administrative and all other Expenses	29,700.00		
		<hr/>	<hr/>
		\$769,625.00	\$769,625.00

The mortgage is past due—interest, 6%—last interest payment, July 1, 1913.

Accrued interest on notes receivable (good) amounts to \$225.

Accrued interest on notes payable amounts to \$9.00.

There were invoices for purchases amounting to \$1,800, and wages, \$2,010, not recorded on books.

Unexpired insurance premiums amount to \$350.

Accrued taxes amount to \$425.

There is a chattel mortgage on the machinery securing notes payable, amounting to \$10,000, and one of the creditors on open account holds a chattel mortgage of \$4,000 on merchandise worth \$2,500 given for purchases, the balance due on which is \$3,000.

\$7,500 of the good notes receivable have been assigned to secure notes payable for borrowed money.

The notes receivable are classified: \$14,500, good; \$1,800, doubtful; and the balance, worthless.

The accounts receivable are classified: \$40,500, good; \$3,500, doubtful; and the balance, worthless.

The land was appraised at \$12,000; buildings, \$25,000; machinery and tools, \$26,000; furniture and fixtures, \$600; horses and wagons, \$1,500; and the merchandise inventory, at \$32,200.

The personal estate of Jones consists of a house and lot valued at \$18,000, and securities valued at \$7,500, and he owes for household debts, \$750, and to his father-in-law, in notes payable, \$20,000, for money borrowed from him.

The personal estate of Smith consists of a house and lot valued at \$12,000, upon which there is a mortgage of \$5,000; securities valued at \$20,000, pledged as collateral for a loan of \$15,000. He has other unsecured debts amounting to \$2,990.

From the foregoing prepare:

- Statement of affairs, Smith & Jones, October 31, 1913, exhibiting thereon also the percentage of their claims likely to be realized by unsecured creditors.
- Deficiency account.
- In order to give you credit for knowledge of principles involved, as well as technical accuracy of solution, attach also your "working sheets," showing how you arrived at solution.

64. (From Ohio C. P. A. Examination, November, 1913.)

The firm of Cleveland & Marion is unable to secure working capital and calls a meeting of its creditors on May 15, 1912, which results in the appointment of a friendly receiver. The receiver takes over the

business and operates it for one year without the active co-operation of the partners. At the end of the year the receiver turns the business back to the partners, who, during the receivership, have received no cash or property of any kind from the receiver. The trial balance of Cleveland & Marion at May 15, 1912, is as follows:

Cash	\$407.80	
Bills Receivable	5,000.00	
Accounts Receivable	22,696.54	
Furniture and Fixtures.....	800.00	
Goodwill	20,000.00	
Accounts Payable		\$32,641.88
Bills Payable		7,000.00
Cleveland Drawing Account	450.87	
Cleveland Capital Account		5,862.96
Marion Drawing Account	492.61	
Marion Capital Account		6,051.15
Reserve for Bad Debts.....		2,270.00
Reserve for Depreciation of Furniture and Fixtures.....		160.00
Purchases	13,996.25	
Return Purchases		176.50
Interest and Discount	462.97	
Salaries and Wages.....	2,941.00	
Rent	600.00	
Miscellaneous Supplies and Expense.....	431.22	
General Expense	276.48	
Sales		14,532.75
Return Sales	145.50	
	<hr/>	<hr/>
	\$68,701.24	\$68,701.24

The merchandise inventory at January 1, 1912, was \$2,500, and this amount is included in Purchases as stated in the above trial balance. The merchandise inventory at May 15, 1912, was \$3,000. There were no other inventories.

The receiver collected \$4,000 from the bills receivable at May 15, 1912, and \$18,752.89 from the accounts receivable at May 15, 1912, and reported that the remaining notes and accounts were worthless. He paid in full, all of the bills payable at May 15, 1912, and settled all of the accounts payable at May 15, 1912, at seventy-five cents on the dollar.

At the end of his receivership, he returned to Cleveland & Marion the assets of May 15, 1912, then in his possession, and he turned over to them the assets and liabilities which resulted from his operation of the business. A summary of his operation showed the following transactions:

Sales	\$51,102.42
Purchases, not including inventory at May, 15, 1912	29,896.68
Operating Expenses (all paid in cash).....	12,293.75
Expenses and Fees of Receivership (all paid in cash)	2,943.96
Cash Receipts for New Customers.....	49,962.31
Cash Receipts for Purchases.....	25,987.16
Inventory at end of receivership.....	3,750.00

Prepare such statement or statements as you consider necessary to show the result of *realization and liquidation* and of the *receiver's trading*, and the *net result of the two*. The receiver's cash account and balance sheet at termination of receivership are not required.

65. (From Michigan C. P. A. Examination, 1909.)

X, Y and Z, foundry men, unable to meet their obligations, suspend payment January 1, 1908, and appoint a trustee to realize and liquidate for the benefit of their creditors. The books showed the following assets and liabilities:

ASSETS		LIABILITIES	
Land and Buildings.....	\$125,000	Mortgage on Foundry Premises.....	\$100,000
Machinery and Tools.....	75,000	Notes Payable	135,000
Furniture and Fixtures.....	10,000	Accounts Payable	105,000
Materials and Supplies.....	95,000	Interest Accrued on Mortgage.....	1,250
Notes Receivable	15,000	Taxes accrued (est.).....	835
Accounts Receivable	115,000	Capital	93,365
Cash	450		
	<hr/>		<hr/>
	\$435,450		\$435,450

The trustee's cash receipts and payments during the year 1908 are as follows:

RECEIPTS		PAYMENTS	
Notes Receivable (Outstanding Jan. 1, 1908)	\$15,000	Notes Payable	\$25,000
Accounts Receivable (Outstanding Jan. 1, 1908)	106,500	Accounts Payable	35,000
Cash Sales	5,435	Interest on Mortgage one year at 5%....	5,000
Notes Receivable (Contracted during 1908)	13,500	Taxes for year 1907.....	865
Accounts Receivable (Contracted during 1908)	212,000	Purchase of Material and Supplies.....	98,000
	<hr/>	Labor	135,000
Total Receipts	\$352,435	General Expenses	45,000
		Interest on Bills Payable to Sept. 30, 1908, at 5%	2,800
			<hr/>
		Total Payments	\$346,665

Other transactions were as follows:

Sales on Credit.....	\$335,000
Bad debts written off accounts prior to January 1, 1908	\$8,000
Bad debts written off accounts subsequent to January 1, 1908.....	2,000
	<hr/>
	10,000
Discounts and allowances to Customers' Accounts prior to January 1, 1908.....	500
Discounts and allowances to Customers' Accounts subsequent to January 1, 1908.....	300
	<hr/>
	800
Notes received from customers.....	20,000
Notes given to creditors (\$110,000 being renewals).....	180,000
Inventory of Materials, December 31, 1908.....	92,000

At the end of the year the business was returned to the owners.

Prepare realization and liquidation account; and balance sheet.

66. (From Massachusetts C. P. A. Examination, April, 1911.)

The Brown Mfg. Corporation, finding its credit impaired, prepares the following statement, as of January 1, 1908:

ASSETS		LIABILITIES	
Plant	\$248,607	Capital Stock	\$200,000
Merchandise	345,156	Accounts Payable	488,361
Accounts Receivable	174,216	Profit and Loss	80,685
Cash	1,067		
	<hr/>		<hr/>
	\$769,046		\$769,046

By agreement of all concerned, the corporation applied for receivers, who were appointed and granted permission to operate.

The receivers took no inventory, but re-valued certain assets in above statement as follows:

Merchandise	\$241,610
Accounts Receivable	139,373

On October 1, 1909, having paid dividends to creditors and receivers' expenses aggregating \$362,845, the receivers reported to the Court the following condition: Plant, \$241,747; Merchandise, \$77,564; Accounts Receivable, \$63,132; Cash, \$47,637; Accounts Payable, \$186,883, and were authorized to turn over the property to the stockholders.

Draw up entries covering the following:

- Corporation books, transfer of property to receivers.
- Corporation books, recovery of property.
- Balance Sheet, after above entries are made.
- Receivers' books, opening.
- Receivers' books, closing.

67. (From Massachusetts C. P. A. Examination, June, 1913.)

A corporation with a balance sheet as at December 31, 1912, given below, is placed in charge of a receiver.

ASSETS		LIABILITIES	
Cash	\$12,188	Accounts payable	\$62,060
Accounts receivable	71,227	Notes payable	60,000
Investments	13,950	Capital stock	50,000
Inventory	83,312	Surplus	55,497
Fixtures	46,880		
	<hr/>		<hr/>
	\$227,557		\$227,557

An examination of the books discloses the following:

The cash consists of deposit in bank, \$10,550; currency, \$595; advanced on traveling expenses, \$250; sundry expense vouchers, \$793.

Accounts Receivable:

Contracted in 1912.....	\$51,822—estimated to shrink \$500
“ “ 1911.....	5,715— “ “ “ 25%
“ “ 1910.....	3,180— “ “ “ 75%
“ prior to 1910.....	10,510—all bad

The investments were considered to be of no value. The inventories were found to contain unsaleable stock to the amount of \$7,525.

The fixtures were bought as follows:

In 1905.....	\$5,115
1906.....	3,002
1907.....	2,150
1908.....	17,810
1909.....	1,005
1910.....	4,505
1911.....	6,115
1912.....	7,178
	<hr/>
	\$46,880

Fixtures are estimated to last ten years, and no depreciation has been entered in the accounts. Bills for goods received amounting to \$3,512 were not included in the accounts payable of \$62,060. The receiver decides to reorganize the business with a capital stock of \$150,000, divided as follows: \$75,000 common, and \$75,000, 6% preferred. He offers the creditors 75% of their claims in preferred and 25% in common stock, with a bonus of 25% common. This is accepted by creditors holding \$60,000 worth of notes, and

\$40,000 of claims on open accounts. He offers the stockholders in the old corporation one share of common stock in the new corporation for every two shares in the old corporation. This is accepted by all of them. He estimates that the new corporation can do a business of \$700,000 a year with the goods costing 70%; that his expenses will be \$175,000; that he will allow a quarter of 1% for bad bills, and a depreciation charge of 10% on the cost of fixtures.

Submit an adjusted balance sheet of the new corporation, and an estimated operating account for the first year, showing the estimated percentage earned on common stock, after paying dividends on preferred stock.

PART VI

ACCOUNTS OF TRUSTEES AND EXECUTORS

From the standpoint of the accountant, most problems which arise in connection with the affairs of a trustee or an executor have to do with differentiating between principal and income and with the contents of the several schedules filed with the probate court.

In these notes, therefore, no attempt is made to prescribe methods of bookkeeping for trustees or executors or to set forth the principle of probate law only in so far as a knowledge of the law is necessary to distinguish between the principal of the estate and the income derived therefrom.

The statutes of the various states prescribe no system by which an executor or trustee is required to keep his accounts; individuals acting in such capacity usually keep their accounts on a cash basis, recording only receipts and disbursements having to do with the principal and income of the estate. These may be kept separate by having a cash book for each or by using a single cash book with columns on each side headed respectively "Principal" and "Income." In short, the system used should be one that would show all details relating to the estate in such a form as to make easy of preparation the account required by the probate court covering the administration of the estate.

If the books are kept by double entry, the balancing account showing the excess of assets over liabilities or offsetting the assets of the estate is the Principal account; the balancing account showing the difference between items of income and expense is likewise called the Income account.

PRINCIPAL AND INCOME

The following are mainly extracts from the law relating to principal and income or from reference works on the subject. Students of the subject are referred to the following books:

A Trustee's Handbook by Loring, Published by Little, Brown & Co., Boston.
and to

Settlement of Estates, by Newhall, Published by G. A. Jackson, Boston.

"In general, at the time the estate comes into the trustee's hands it is all principal, in whatever condition it may happen to be, and all yearly increase thereafter is income."—*Loring*.

GAIN AND LOSS: "The general rule is that any gain other than the usual yearly income, and any loss other than the usual yearly charges, fall to the principal of the fund."—*Loring*.

The advance in value of real estate or investments without any increase in the income would therefore belong to principal unless the life tenant can force a sale and re-investment by which his income is correspondingly increased.

If a business is continued temporarily in order that values may not be sacrificed due to a hasty conversion of the property, any gain or loss arising therefrom is apportioned.

If a part of the trust be invested in timber land, trees cut to encourage a healthy growth are income; other timber principal. Sale of gravel is income.

Any loss by depreciation of the market value must be borne by the principal.

DIVIDENDS: The current dividends on stocks belong wholly to income.....

If, however, the investment is a wasting one, such as mining stock, unless the life tenant is expressly given the full income by the settlement, he is entitled to receive only the current rate of interest on the inventory or cost value of the investment, and the balance will be applied to reduce the valuation.....
..... "When the excess of dividends has entirely wiped out the cost of the investment, all the dividends will go to principal."—*Loring*.

EXTRA DIVIDENDS: The rule adopted by the Supreme Court of the United States and by the courts of a number of the states, including Massachusetts, is "to regard cash dividends however large as income, and stocks dividends, however made, as capital."

"A cash dividend though paid from earnings accumulated before the beginning of the trust has been held to be income."

The action of the directors as expressed by their vote would determine in the case of dividends in liquidation. If no appointment is made by them the whole amount distributed will be principal.

RIGHTS: "The right to subscribe for new stock whether availed of or sold for cash, is generally held in all jurisdictions, irrespective of rules governing extra dividends, to be principal."—*Loring*.

DELAYED DIVIDENDS: When the dividends are cumulative, and fall in arrears before the trust is created and are paid in full after the creation of the trust, held that they should be apportioned.

INTEREST: The general rule is that the whole amount received as interest is income.

In most states, if a bond is purchased at a premium, sufficient of the interest must be set aside yearly to wipe out the premium at maturity.

"Interest accrued from day to day, and will therefore be apportioned upon a sale of the security on which it accrues, or upon the termination of the life estate, the interest accruing up to the date of sale or death being income, and the balance, principal. But where the interest is payable by a coupon, which may be detached and sold separately, the rule in the absence of statute, is otherwise, and there is no apportionment. But when the statute exists, even coupons are apportioned."—*Loring*.

DISCHARGE OF ENCUMBRANCE: If there is a mortgage on the estate, if at once discharged, it is paid out of principal, but if carried, the interest is chargeable to income.

"If the trustees are called upon to discharge an involuntary encumbrance, such as a betterment assessment or judgment, the cost is apportioned."

ALTERATIONS AND REPAIRS: "Alterations or additions to real estate whereby the usefulness or rental value is increased are chargeable to principal, but the repairs or expenditures which are necessary to maintain the property in its previous condition are chargeable to income."

If an expenditure is in the nature of both a betterment and a repair, it is apportioned.

All expenditures on newly acquired property which are necessary to make it tenantable, are chargeable to principal.

TAXES: "All annual taxes, except those assessed on vacant land, are chargeable to income. The whole tax for the year is chargeable to the tenant enjoying the property at the time the tax was assessed."

"Special assessments, such as betterment assessments, sewer taxes, etc., are chargeable to principal or are apportioned."—*Loring*.

INSURANCE: "Insurance premiums are expressly chargeable to income by the terms of most carefully drawn trust instruments, and where no express provision is made in the instrument the general practice is to charge them to income."

"In the case of a partial loss the funds recovered would be used in repairing. In the case of a total loss, the fund should be invested or could be used for rebuilding."

"If the life tenant insures the property, the remainderman has no claim on the fund recovered."—*Loring*.

Insurance received in excess of fire damage belong to principal.

EXPENSES: All ordinary current expenses are chargeable to income. This includes the charges of the trustee for managing the property by way of a commission on income. Extra charges beneficial to the estate are chargeable to principal or may be apportioned.

Broker's commissions for changes of investments are in practice chargeable to principal.

COMPENSATION OF EXECUTORS AND TRUSTEES

Newhall says, "The law regarding compensation differs in the several states. In some states, a fixed commission is allowed and in others the compensation depends upon the discretion of the court. In Massachusetts the trustee is entitled to reasonable compensation. The general rule is 5 per cent. of the gross income. . . . Usually, there is also a special commission for the final distribution by the trustee, if he makes one. Ordinarily, this is fixed at $2\frac{1}{2}$ per cent. of the assets distributed." No general rule can be given regarding the compensation allowed executors and administrators by Massachusetts courts. Much depends upon the size of the estate, and the work involved in its settlement. The court will always allow a reasonable compensation based upon a consideration of all the factors involved.

In the state of New York, commission allowed is computed on the amount of money handled, the rate of commission being as follows:

5 %	on a sum not exceeding \$1,000
$2\frac{1}{2}$ %	" " " " " 10,000
1 %	on the remainder.

CONTENTS OF SCHEDULES CONTAINED IN TRUSTEES ACCOUNT

Schedule A:

Amount of personal property according to inventory, or
Balance of principal, according to next prior account.
Amounts received on account of principal, gain on sale of personal property, and from other property.

Schedule B:

Sundry payments and charges on account of principal.

Schedule C:

Balance of Principal.

Schedule D:

Amounts received on account of income.

Schedule E:

Sundry payments and charges on account of income.

Schedule F:

Changes of investments. (Not usually made out, such changes being shown in Schedules A and B.)

68. (From Massachusetts C. P. A. Examination, April, 1911.)

January 1, 1908, a trustee under a will holds 100 shares of J. K. Co., the inventory value of which is \$13,000. The par value is \$100 per share. The total capital stock of J. K. Co. is \$600,000. April 1, 1908, the R. S. Co. is organized with \$1,200,000 capital stock; par value of shares, \$100, and at that date, J. K. Co. transfers certain of its assets to R. S. Co., receiving in payment, therefor, all of the latter's capital stock, which J. K. Co. distributes pro rata, to its stockholders and proceeds to liquidate its remaining assets and its debts; paying, December 1, 1908, in cash to its stockholders a dividend of 150 per cent. in final liquidation. The trustee sells all of his R. S. Co. stock, December 31, 1908, at \$210 per share. Write, with full explanation, (a): entries that should be made in the books of the trustee, including the ledger account for the original stock, and (b): the entries to be made in the trustee's account to the probate court, for the receipt of the R. S. Co. stock and the cash.

69. (From Massachusetts C. P. A. Examination, April, 1911.)

Before closing, at the end of a three months' period, the books of a Trust Estate show the following balances:

Real Estate	\$396,868.39	Capital	\$523,691.06
Running expenses, real estate.....	1,507.02	Insurance received in excess of fire damage	212.70
Investments	123,010.11	General income, balance at beginning of period	2,037.52
General expenses	527.51	Income, real estate	6,748.65
Cash (Principal)	4,450.26	Income, from investments.....	4,002.53
Cash (Income)	11,423.02	X, Trustee	135.02
		Y, Trustee	270.04
		Z, Trustee	270.04
		Sale of "rights".....	\$125.00
		Less brokerage	6.25
			118.75
		Loans payable	300.00
	<u>\$537,786.31</u>		<u>\$537,786.31</u>

Separate the above accounts into two trial balances showing Principal and Income. Close "Sale of Rights" account, and if you observe any discrepancy in the cash correct it.

The trustees are to receive 5 per cent. on the gross income for the period as compensation. This is to be divided among them so that Y and Z each get twice as much as X. Pay the loan of \$300.00. Pay the

trustees the amount due them. Purchase 20 shares of N. Y. C. stock at $107\frac{3}{8}$ (brokerage $\frac{1}{4}$) and close the books, showing the Income divisible among the beneficiaries. (Give necessary cash book and journal entries, also balance sheet after closing.)

70. (From Massachusetts C. P. A. Examination, June, 1912.)

The books of a trustee under a will, show the following condition April 1, 1909:

ASSETS		LIABILITIES	
Cash	\$3,000	Principal	\$56,000
Bonds: A. B. Co. \$10,000 4s, July 1, 1915..	9,000		
Stock: D. E. Co., 200 shares.....	24,000		
Stores, 157 K St.....	20,000		
	<hr/>		<hr/>
	\$56,000		\$56,000

Following is the trustee's

Cash Account, April 1, 1909, to March 31, 1910:

RECEIPTS		PAYMENTS	
1909		1909	
Apr. 1 Balance	\$3,000	Apr. 10 Repairs, store	\$150
4 Rent, store	500	12 Insurance, store	125
July 1 Interest, A. B. Co.....	200	June 1 Bonds, J. K. Co., \$2,000 6s, April	
1 " on bank deposit.....	8	1/40	2,400
3 Rent, store.....	500	Brokerage thereon	5
31 Dividend, D. E. Co.....	600	Accrued interest thereon.....	20
Oct. 1 Interest, J. K. Co.....	60	Aug. 15 J. Doe, a/c income.....	1,250
4 Rent, store	500	Oct. 20 Repairs, store	375
1910		Nov. 1 Taxes, store	300
Jan. 1 Interest, A. B. Co.....	200	1910	
2 Rent, store.....	500	Jan. 20 Brokerage, for sale of store.....	540
16 Sale of store.....	\$27,000	Feb. 15 J. Doe, a/c income.....	1,250
Less purchase-money mortgage J.		15 Stock, X. Z. Co., 304 sh. pref'd..	33,440
Smith, Jan. 16, 1910, 5 years. In-		Brokerage thereon	38
terest 5% per annum, payable			
semi-annually	5,000		
	<hr/>		
	22,000		
Jan. 31 Dividend, D. E. Co.....	600		
Feb. 12 Sale 100 shares D. E. Co.....	12,900		
Mar. 2 Dividend, X. Z. Co.....	912		
3 Sale of "rights" D. E. Co.....	100		

J. Doe is the life tenant. Pay the trustee 5 per cent. of gross income; pay J. Doe the balance of income and prepare the necessary schedule for the trustee's account to a Massachusetts probate court for the period beginning April 1, 1909, and ending March 31, 1910.

71. (From Massachusetts C. P. A. Examination, June, 1913.)

In the Inventory of an executor, there is an item, No. 6: 100 Shares Utility Co. at 100, \$10,000.

The executor sells 80 of these shares at 150 flat.

State how the transaction should appear in his probate account.

72. (From Massachusetts C. P. A. Examination, October, 1914.)

The Beneficiary of a Trust (Massachusetts Probate) dies July 6, 1913, and the Trust was determined.

Taxes on the property are assessed as of April 1, 1913, payable October 1, 1913.

State the liability for taxes as between the Beneficiary and the Remainderman.

73. (From Massachusetts C. P. A. Examination, October, 1914.)

A. B. Jones died April 15, 1912, leaving one-half of the property to his wife outright; the balance to be held in trust, the income of which was to go to his wife during her lifetime, and at her death the principal to go to Technology.

The estate was appraised as follows:

1,000	Shares	Pullman Co.	.....	\$160,000
1,000	"	General Electric Co.	.....	166,000
2,000	"	Penn. R. R.—Par \$50.	.....	123,000
4,000	"	United Shoe, Com.—Par \$25.	.....	196,000
		Deposits in Banks.	.....	20,200
		Money in the house.	.....	800
				<hr/>
				\$666,000

Dividends had been declared as follows:

Rate	Stock	Date of Declaration	Stock of Record	Payable
2	Pullman	March 15	April 1	April 16
2	General Electric	" 15	March 31	" 20
2	United Shoe	" 21	April 1	" 20

From April 15, 1912, to April 15, 1913, the cash receipts were:

Pullman Co. 4 quarterly div.	.....	\$8,000
General Elec. 4 " "	.....	8,000
Penna. R. R. 4 " "	.....	6,000
United Shoe 4 " "	.....	8,000
Interest on Bank Balances.	.....	300
		<hr/>
		\$30,300

And the disbursements for the same period were:

Debts of Testator.	.....	\$4,500
Expenses of funeral and last sickness.	.....	1,500
Income to widow.	.....	20,000
		<hr/>
		\$26,000

The executor figured his commission at 5 per cent. of the income and $2\frac{1}{2}$ per cent. of the principal, and drew a check for the amount. He paid the widow the balance of income on April 15, 1913, and distributed the Principal in equal shares, at the appraised value, between the widow and the Trust Fund.

- State how much the Executor received for commission.
- State how much the widow received as balance of income.
- State how much cash was paid into the Trust fund.

74. (From New York C. P. A. Examination, June, 1903.)

John Doe died January 15, 1901, leaving a small estate, and in his will made Richard Roe his executor. The will provided that a legacy of \$5,000 should be paid to Mary Doe, sister of the testator, and that the residuary estate should go to the testator's wife and two daughters, share and share alike.

The estate consisted of the following:

Cash in the Dime Savings Bank.	.....	\$348.50
One month's salary (due the testator from his employer)	.....	250.00
10 Union Pacific R. R. Co.'s first mortgage 5 per cent. gold bonds of \$1,000 each	.....	10,000.00
One first income bond, Central R. R. of Georgia	.....	1,000.00
Demand note of John Smith.	.....	100.00
At his death the testator owed two month's rent	.....	\$50.00
Acker, Merrill & Condit, household supplies	.....	\$81.50

The appraiser appointed by the Surrogate inventoried all securities and accounts due the estate at their face value.

The executor received \$348.50 from the Dime Savings Bank, with \$14.25 interest. He sold the Union Pacific bonds at 102 and two months' interest, the Central of Georgia income bond for \$875 flat, and paid M. J. Senior, undertaker, \$541 for funeral expenses; Arnold, Constable & Co. \$185 for mourning apparel

of widow and children. He also paid for legal and other expenses incidental to the probating of the will, \$125. John Smith was bankrupt, and his note proved to be worthless. The executor deducted his commission and distributed the funds of the estate according to the terms of the will.

From the above statement of facts prepare (a) the executor's inventory of the estate (b), the executor's summary statement and schedule for presentation to the surrogate's court in final accounting (c), a statement of the account of commissions to which the executor was entitled (d), a statement of the amounts paid to each beneficiary.

75. (From New York C. P. A. Examination, June, 1911.)

Philip Jones, a citizen of New York State, died April 1, 1909, leaving a will appointing four executors. The will was probated May 1, 1909, showing the following bequests:

X $\frac{1}{3}$ share, B $\frac{1}{4}$, C $\frac{5}{12}$ of the entire estate after payment of funeral expenses, debts, etc.; a specific bequest to the A Hospital consisting of \$20,000 and a parcel of improved property valued at \$50,000.

The inventory filed by his executors was as follows: 5% mortgage for \$40,000, interest payable semi-annually on June 30 and December 31; 500 shares common stock of Industrial Company, par value \$100, appraised at 110; 50—5% first mortgage bonds of A Railway Company, par value \$100, appraised at 104, interest payable semi-annually on March 1 and September 1; accounts receivable, valued at \$20,000; cash in banks and on hand, \$69,250; household furniture and effects appraised at \$5,500.

The executor's transactions were as follows:

CASH RECEIPTS

500 shares of Industrial stock sold at \$115 per share.
 45 first mortgage bonds sold July 1 at \$111 and accrued interest.
 Accounts collected, \$18,500 (balance worthless).
 6% dividend on Industrial stock declared May 1, 1909.
 Interest on bank balances \$1,300, of which \$400 accrued prior to testator's death.
 Interest on bonds and also on mortgage duly collected.
 Rents collected \$4,000, of which \$1,500 accrued prior to death of testator.
 The household furniture and effects were taken by X at the appraised valuation.

CASH PAYMENTS

Funeral expenses	\$2,000
Expenses of probating will.....	335
General legal services.....	1,000
Rent of safe deposit vault.....	50
Care of cemetery lot, etc.....	500
Premium on executors' bonds.....	100
Stationery, postage, etc.....	125
Debts of deceased.....	12,865
Taxes	1,025
X on account of legacy.....	12,000
C on account of legacy.....	20,000

The inventory on December 31, 1909, the date on which the executors wish to render an accounting, is as follows:

5% mortgage, \$40,000.
 Five 5% first mortgage bonds of A Railway Company.
 Interest on X's advances amounts to \$350 and on C's advances \$575.

Prepare (a) a summary statement separating principal and income (b), a statement showing amounts due beneficiaries (c), a statement showing the commission due executors.

76. (From New York C. P. A. Examination, January, 1906.)

Fredericka Ward dies leaving one daughter, Doris, and two sons, Henry and Arthur, all of age, surviving her. Her will directs that after the discharge of all just claims on her estate there shall be placed in trust for Fredericka Winter, the child of her deceased sister, \$50,000, the income of which is to be used for

the child's support by the guardian appointed under the trust, and the principal to be paid over to her when she becomes of age. The remainder of the estate is to be divided equally among the testator's three children.

The estate consists of cash in a trust company, \$12,500; bonds and mortgages on real estate, \$250,000; registered municipal bonds, \$90,000; household furniture appraised at \$20,130; horses and carriages appraised at \$3,000; clothing appraised at \$2,000, and jewelry appraised at \$7,400.

One of the aforesaid mortgages, \$50,000 at 5%, is in arrears of interest for one year, and foreclosure proceedings are commenced by the executor, with the result that on an immediate settlement the estate realizes the principal and the interest so in arrears and the trust fund is paid over to the guardian of Fredericka Winter. The February and August semi-annual instalments of interest at 5% on the two remaining mortgages of \$100,000 each and the January and July interest on the registered 4% bonds are all duly received, and the bonds are forthwith sold for \$90,190. The executor then pays \$30,000 to Doris, and \$10,000 each to Henry and Walter respectively, on account of their interests. Doris takes, as part of her legacy, household furniture, \$5,000; clothing, \$900, and all the jewelry at the appraised valuation. Each of the sons takes as part of his legacy one of the remaining bonds and mortgages.

On the sale of the remaining effects the furniture realizes \$15,000, the clothing \$1,000 and the horses and carriages \$3,200. There is also received from the trust company for interest on deposit, \$350. The executor expended for probate \$150, funeral \$600, monument \$1,000, tax on personal estate \$350, counsel fees \$1,500, fire insurance \$32 and sundry claims against the estate \$7,201. The allowance for executor's fees was fixed by the will at \$2,500.

Prepare a summary accounting showing the cash in hands of executor and the amount payable to each of the heirs.

PART VII

BRANCH HOUSES, SELLING AGENCIES AND CONSIGNMENTS

77. (From Massachusetts C. P. A. Examination, June, 1912.)

A manufacturing concern having a branch in another town presents the following trial balances on January 1, 1912:

MAIN OFFICE			
Plant	\$125,500	Capital stock.....	\$250,000
Material and supplies (inventory Jan. 1, 1911)	68,300	Notes payable	30,000
Purchases	245,800	Accounts payable	42,630
Labor	163,400	Net sales	480,300
General expense	24,900	Profit and loss (Jan. 1, 1911).....	31,820
Insurance (1 yr. to Jan. 1, 1912).....	3,400		
Accounts receivable (worth 95%).....	84,600		
Cash	4,870		
Dividends paid	20,000		
Branch	93,980		
	\$834,750		\$834,750
BRANCH			
Plant	\$35,200	Net sales	\$97,620
Material and supplies (inventory Jan. 1, 1911)	16,500	Main office	93,980
Purchases	62,450		
Labor	40,610		
Insurance (1 yr. to April 1, 1912).....	1,260		
General expense	7,820		
Accounts receivable (worth 100%).....	24,600		
Cash	3,160		
	\$191,600		\$191,600

Inventories of material and supplies on January 1, 1912, were: main office, \$45,300; branch, \$28,400. No inventories of finished goods, as same were sold on contract for daily shipments, and are all billed up on closing.

In closing on January 1, 1911, the branch charged off all insurance.

General Expense includes salaries, office expense, taxes, etc.

Selling Expense has been deducted from the sales.

Construct one working account, profit and loss account and closing balance sheet for the entire concern, omitting estimate for depreciation.

78. (From Massachusetts C. P. A. Examination, June, 1912.)

A commission house, composed of three partners, is selling agent for sundry consignors whose accounts are unguaranteed. The rate of commission is 3% of the net sales. The fiscal terms end June 30 and December 31. The partners' capital accounts are to be credited with interest at 6% p. an., and with the net earnings which are to be apportioned as follows:

J. Doe, 60% ; R. Roe, 30% ; J. Smith, 10%. No interest is to be computed on J. Doe's drawing account; that account is to be credited with 1% of the net sales. Following is the trial balance, December 31, 1910:

Cash	\$16,800	Sundry creditors	\$100
Advances to sundry consignors, account of sales	105,700	Sundry consignors' sales accounts.....	235,600
Accounts receivable for account of sundry consignors	235,600	J. Doe capital acct. (June 30, 1910)...	100,000
J. Doe drawing acct.....	5,800	R. Roe capital acct. (June 30, 1910)....	9,000
Salaries	3,400	J. Smith capital asst. (June 30, 1910)...	4,000
Rents	700	Commissions	18,000
Traveling	600	Interest received from consignors, on advances account of sales (to Dec. 31, 1910)	2,900
Teaming	200		
Miscellaneous expenses	800		
	<hr/>		<hr/>
	\$369,600		\$369,600

The net sales, during the six months, were \$600,000. Write, in proper form, a statement for the six months ended December 31, 1910, showing the detail of gross earnings; expenses; total interest credited to the partners; net earnings; and the distribution of the latter. Show a balance sheet, December 31, 1910.

79. (From Massachusetts C. P. A. Examination, October, 1914.)

The condition of the Atlantic Co. at the close of business December 31, 1913, is reported by them as follows:

ASSETS	
Real Estate	\$150,000.00
Machinery	200,000.00
Cash	24,500.40
Accounts Receivable	320,800.50
Merchandise	375,480.70
	<hr/>
	\$1,070,781.60
LIABILITIES	
Capital Stock.....	\$500,000.00
Mortgage on Real Estate.....	100,000.00
Accounts Payable	67,000.00
Notes Payable	100,000.00
Surplus	200,000.00
Profit and Loss.....	103,781.60
	<hr/>
	\$1,070,781.60

The Company has a branch to which it sells its goods at 20% over inventory prices and carries this account together with other Branch Assets as a receivable.

The statement of the branch on same date was:

ASSETS	
Fixtures ..	\$6,205.79
Cash	1,107.55
Accounts Receivable	12,478.14
Merchandise at price billed to Branch.....	5,241.95
	<hr/>
	\$25,033.43
LIABILITIES	
Atlantic Company	\$25,033.43

- What was the inventoried value of the Branch Merchandise?
- Prepare a corrected statement of the Atlantic Company.

80. (From Massachusetts C. P. A. Examination, October, 1914.)

The Peerless Storage Warehouse Company has its Treasurer's office in Boston and Warehouse in a nearby town. The Treasurer's books at June 30, 1914, show the following:

Warehouse Property	\$50,000.00
Cash	98.05
Prepaid Interest	81.99
Accrued Interest on Investments.....	1,584.00
Investments	48,803.64
Due from Warehouse.....	643.80
Capital Stock	55,000.00
Mortgage Bonds	42,500.00
Accrued Interest on Bonds.....	850.00
Reserve for Depreciation.....	497.24
Surplus	2,364.24

A separate set of books at the Warehouse show the following accounts and balances at June 30, 1914:

Cash	\$311.05
Accounts Receivable	543.27
Accounts Payable	10.52
Due to Treasurer.....	843.80

The Treasurer had received \$200 in payment of Accounts Receivable at June 30, 1914, which was credited on the Treasurer's books to the account with the Warehouse, but was not taken up on the Warehouse books until after June 30.

The Y Company is incorporated on March 31, 1914, with \$100,000 Capital Stock and acquires control of the Peerless Storage Warehouse Company by capital stock ownership. It issues on May 15, 1914, \$50,000 (par value) First Mortgage 5% Bonds; purchases 500 shares of the Peerless Storage Warehouse Company stock (par \$100) at 101, owns land costing \$65,000, purchases \$20,000 (par value) First Mortgage 4% Bonds due 1920 at 98¼, has cash on hand \$24,000, and a balance in the Profit and Loss Account of \$9,150. The taxes assessed on the land as of May 1, 1914, for the following year were \$1,200 and there was interest accrued on the bonds issued from May 15, 1914, to June 30, 1914.

a. Adjust the Warehouse Company books, bringing the inter-office account with the Treasurer in agreement.

b. Prepare a Consolidated Balance Sheet of the three sets of books at June 30, 1914, and show therein the net amount of capital stock of each company in the hands of the public.

81. (From Massachusetts C. P. A. Examination, June, 1910.)

A branch office business was started at the first of the year, the head office advancing \$5,000 cash. During the first year merchandise was shipped to branch invoiced at \$75,000.

An auditor checking up the business at the close of the year finds the following:

Merchandise sales were \$60,000 with selling price of goods 20 per cent. advance on invoice cost.

Proper vouchers were on file duly receipted for following payments:

Rebates and allowances on damaged goods.....	\$1,500
Salaries and other expenses.....	4,500
Freights	2,500

The books also showed:

Remittances to head office.....	\$35,000
Uncollected accounts	15,000

The balance of sales having been realized in cash less rebates and allowances as noted.

The cash on hand and inventory of unsold goods together with the foregoing records properly account for everything.

Prepare statement such as an auditor would make in reporting to the head office, balancing the business of the branch house.

82. (From New York C. P. A. Examination, June, 1914.)

A contracts with a textile establishment to sell the mill's annual output on the following conditions:

The mill is to bill the output to A at cost. A is to finance the mill to the extent of 75% of cost on receipt of goods. The balance is to be remitted by A as the various shipments are sold, less 5% and advances. At the end of the year an analysis of A's affairs reveals the following, as shown by his books, the goods being sold at 10% profit above factory cost (mill shipments, \$7,327,918.18):

	Debits	Credits
Mill advances	\$5,545,938.00	\$5,000,000.00
Mill sales	6,400,000.00	7,840,710.00
Freight and cartage.....	90,000.00	80,000.00
Customers	7,840,710.00	7,632,200.00
Cash	7,610,200.00	5,635,938.00
Discounts	22,000.00	.....
Commission .....	.....	320,000.00
Mill Account .....	.....	1,000,000.00
	<hr/>	<hr/>
	\$27,508,848.00	\$27,508,848.00

Prepare A's financial statement.

PART VIII

MANUFACTURING AND COST ACCOUNTS

83. (From Massachusetts C. P. A. Examination, October, 1916.)

The net debit balances of the operating accounts of a manufacturing corporation at the end of the year 1914, before closing the books, were as follows:

Materials	\$237,199.93
Direct Labor	127,716.95
Indirect Labor	54,366.32
Supplies	17,287.79
Repairs	59,700.36
Power, Heat and Light.....	62,911.41
General Factory Expenses	38,559.79
Administrative Expenses	32,513.65
Selling Expenses	72,993.95

The inventories December 31, 1914, were as follows:

Materials	\$53,589.66
Supplies	2,935.16
Direct Labor in Process.....	6,582.16
Materials in Process.....	10,352.70
Burden in Process	11,847.89
Finished Stock	35,692.45

The purchases and expenses during the year 1915 were as follows:

Materials	\$287,691.09
Direct Labor	161,437.00
Indirect Labor	57,163.32
Supplies	17,914.85
Repairs	61,316.78
Power, Heat and Light.....	70,324.40
General Factory Expenses	40,610.37
Administrative Expenses	33,922.36
Selling Expenses	81,536.27

During the year 1915 the overhead (burden) cost of goods manufactured was figured as a percentage of direct labor based on the 1914 figures. With the accounts set up on this basis the inventories December 31, 1915, were as follows:

Materials	\$66,732.12
Supplies	3,266.27
Direct Labor in Process.....	7,203.45
Materials in Process.....	12,510.35
Burden in Process.....	12,966.21
Finished Stock—Made up of:	
Material	\$17,751.53
Direct Labor	8,593.55
Burden	15,468.39
	<hr/>
	\$41,813.47

The net sales for the year 1915 were \$863,910.25.

- a. Set up the ledger accounts to show the transactions for the year 1915 before closing the books, and then make adjusting and closing journal entries.
- b. Show operating statement for the year 1915.

84. (From Massachusetts C. P. A. Examination, June, 1910.)

The fiscal year of a Manufacturing Company ends June 30, 1908, and the bookkeeper presents a statement to the Directors made up in the following form:

Gross Sales	\$285,000.00	
Increase of Inventory	15,000.00	
		<u>\$300,000.00</u>
Cost of Sales:		
Operating expenses, material and supplies.....	\$257,000.00	
Plant expense	12,000.00	
Freight on returned goods	600.00	
Sundry purchases finished goods.....	10,400.00	
		<u>280,000.00</u>
Manufacturing Profit		<u>\$20,000.00</u>
Other Income:		
Miscellaneous earnings	\$1,500.00	
Profit on contracts.....	6,500.00	
Discount on purchases	500.00	
		<u>8,500.00</u>
		<u>\$28,500.00</u>
Less:		
Discount on sales.....	\$2,875.00	
Rebates and allowances.....	1,125.00	
		<u>4,000.00</u>
Net Plant Profit.....		<u>\$24,500.00</u>
Less:		
General expenses	\$5,500.00	
Interest	1,500.00	
		<u>7,000.00</u>
Net Profit		<u>\$17,500.00</u>

You are required to make up a Profit and Loss statement in regular form, showing Purchases, etc., and using such of the above figures as may be necessary, together with these following: Inventory, June 30, 1907. Material, \$115,000; Supplies, \$35,000; Finished Goods, \$45,000. Inventory, June 30, 1908. Material, \$140,000; Supplies, \$10,000; Finished Goods, \$60,000. Material used in factory during the year, \$75,000. Wages, \$122,500. Fuel, \$2,500. Repairs and Renewals, \$2,000. Other operating expenses, \$55,000, which includes \$25,000 supplies used.

85. (From New York C. P. A. Examination, June, 1911.)

The cost books of Factory A, the product of which is charged to the main office of the X. Y. Z. Co. at factory cost, show the following facts January 1, 1910:

Cash (imprest fund), \$500; raw materials, \$17,688.51; wages unpaid and distributed, \$2,348.67; goods in process, at prime cost, \$62,258.61, plus \$11,352.75 for general expenses and \$9,007.50 for management charges; finished goods, \$45,290.20.

The invoices for purchases of raw materials for the year amounted to \$78,375.65; wages paid, \$133,041.27; management charges, \$53,695; factory expenses, \$36,967.08. The cash receipts for one year's rent of loft were \$1,200 and for 11 months' sale of power \$330, the twelfth month being unpaid.

The raw materials consumed during the period amounted to \$64,188.33; management charges distributed \$55,761.90; factory expenses distributed to costs amounted to \$43,033.23. There was also a loss on machinery replacements of \$107.50.

The finished product output for the year amounted to \$324,583.43, including all costs, and the transfers to the main office were \$338,297.90.

At the close of the period December 31, 1910, there remained unpaid and undistributed to goods in process the regular factory payroll for three days amounting to \$2,857.93 and also 1,500 hours of operatives' overtime at an average rate of 45 cents per hour, payable on a basis of $2\frac{1}{2}$ hours overtime as the equivalent of $3\frac{1}{2}$ hours regular time.

Raise all the ledger accounts affected and show final trial balance.

86. (From New York C. P. A. Examination, June, 1914.)

On January 1, 1914, The Arlington Company's records show the following conditions of its accounts:

Inventory of raw materials, \$46,864.26; accrued factory payroll, applied and distributed, \$2,495.34; goods in process at prime cost, \$191,665.32; the further value of \$24,111.51 for the factory overhead, also \$36,224.76 to cover superintendence; finished goods in stock show a total cost of \$64,968.03.

During the period from January 1 to December 31, 1914, purchases of raw materials amounted to \$241,249.35; factory payrolls, \$377,381.70; superintendence, \$114,300; factory expenses, including wages not applied to cost accounts, \$74,538; interest paid on notes, \$3,600; dividends received, \$15,012.

During the period mentioned, the operations in the factory comprised: Raw materials requisitioned for consumption, \$239,461.02; wages applied and distributed to manufacturing cost, \$360,751.20; and to factory expenses, \$17,878.17, included in the sum stated in the paragraph above.

There were also forwarded from the factory to the warehouse, finished goods at prime cost, covering materials, \$235,627.74, and labor, \$355,001.25. The cost of goods sold during the year was \$755,849.70, and the proceeds from goods sold, \$907,019.64.

On December 31, 1914, the goods in process included, in addition to prime cost, factory overhead amounting to \$25,317.06, and superintendence, \$38,035.98, and accrued factory payroll, applied and distributed, amounting to \$3,743.01.

Show the cost controlling accounts as they would appear in the general ledger, their operation, and the resulting net profit.

87. (From New York C. P. A. Examination, February, 1908.)

The bookkeeper of a manufacturing concern could produce only the following statement from its records on January 1, 1907:

Manufacturing expenses	\$4,622.89
Capital stock	10,000.00
Plant and equipment	17,500.00
Gross sales	8,469.10
First mortgage bonds (due Dec. 31, 1907)	15,000.00
Materials and supplies (inventory)	4,289.34
Notes payable	5,000.00
Accounts receivable	5,423.23
Accounts payable	2,436.28
Interest on bonds (7 months)	393.75
Interest on notes and accounts payable	282.40
Cash	832.14

On January 1, 1907, the management changes, and you are later retained as a public accountant to conduct an examination and prepare a balance sheet as of January 1, 1908.

You find that during the preceding year the directors have subscribed in cash to \$7,500 additional capital stock and have retired all the notes and old accounts payable, and that no interest was paid on these accounts for the year. You also find that the plant and equipment was revalued at \$15,000 and 5 per cent. of this amount was charged off to provide for depreciation, while an additional $2\frac{1}{2}$ per cent. was ordered placed in Reserve Account to cover repairs and renewals, the entire $7\frac{1}{2}$ per cent. being charged direct to Profit and Loss. The bond outstanding fell due on December 31, 1907, and was paid, principal and interest, in cash.

An inventory of materials and supplies placed their value at \$2,328.19, the practice being to charge all purchases direct to Manufacturing Expenses and to credit back the amount of the inventory.

The accounts payable (all for material and non-interest bearing) amount to \$546.28.

Of the accounts receivable January 1, 1917, \$4,968.18 was collected and the balance charged off as uncollectible.

In addition to the material used from stock during the year and the amount still due for material purchased, the manufacturing expenses were \$3,720.52, all paid in cash, the total manufacturing expenses being 31 per cent. of the gross sales for the year ending January 1, 1908.

Of these 91.3 per cent. were collected in cash and the balance, all of which is considered good, remains on the books in accounts receivable.

Produce a comparative balance sheet of January 1, 1908-1907, and state the amount of gross sales for the year.

PART IX

FOREIGN EXCHANGE

Foreign Exchange is a system by which international debts are discharged. These debts, as is the case in domestic trade, must be paid either in cash or in some form equally satisfactory to creditors. International balances are often settled by means of the transportation of gold, but this method is subject to the risk of loss by shipwreck, loss due to abrasion, cost of transportation and the charge for insurance; to avoid this risk and expense, the method of settling debts between nations through the medium of commercial paper is of principal importance in the study of Foreign Exchange.

Foreign Exchange transactions, in addition to the shipment of gold from one country to another, would include the issuing of a draft, bill of exchange or money order payable in a foreign country; an order either written or cabled authorizing the paying of a sum of money abroad; a bill of exchange drawn upon the purchaser of goods shipped to a foreign country; commercial paper drawn in a foreign country payable in this country; the purchase or sale of gold or specie of other countries; letters of credit and travelers' cheques.

A BILL OF EXCHANGE is a draft drawn in one country and payable in another. When a bill of exchange is drawn against a shipment of goods, the bill of lading, insurance papers, clearance papers, and certificates covering weighing and inspection are attached to the bill which then becomes known as a DOCUMENTARY BILL OF EXCHANGE; if it is a transaction of which these papers would form no part, it is called a CLEAN BILL OF EXCHANGE. In the case of a documentary bill the drawee must either pay the draft or promise to do so by accepting it in the usual manner before he can get possession of the documents giving title to the goods.

Frequently bills of exchange are drawn in sets of two. These are sent by different mails and sometimes by different routes in order to reduce the risk of loss; when one is paid the other becomes void.

A TRAVELERS' CHEQUE is a cheque issued for a fixed amount and made payable in the currency of the foreign country or countries specified on the cheque. After being signed and countersigned by the holder they are payable to order without discount or commission by a large list of foreign banks and bankers. A commission of usually $\frac{1}{2}\%$ is charged by the bank from which the cheque is purchased.

A LETTER OF CREDIT is a letter issued by a bank or banker introducing the holder to the foreign correspondents of the bank which issued it and requesting such banks to furnish the holder with such funds as he may require up to the aggregate amount named in the letter. A commission of usually 1% is charged by the issuing bank.

A CABLE TRANSFER is a cabled order to pay a specified sum of money to a person or firm in a foreign country. The rate charged is the current rate of exchange plus a commission of about $\frac{1}{4}\%$ plus the usual cable charges.

The PAR OF EXCHANGE is the standard value of the gold contained in the monetary unit of one country expressed in terms of the monetary unit of another country. Example 1: \$4.8665 which is the par of exchange between the United States and England.

The rates of exchange fluctuate by certain fixed amounts or fractions governed by the relative state of indebtedness on one country to another, commonly spoken of as the balance of trade; by the supply of gold; by the degree of risk incurred in transporting gold, etc.

A knowledge of the monetary systems of the leading commercial countries of the world is essential to a clear understanding of the theory of Foreign Exchange and its application to actual transactions. The

following table gives the monetary unit of the more important foreign countries and their equivalent value in United States money:

Country	Unit	Value in U. S. Money
Great Britain	Pound Sterling	4.8665
German Empire	Mark	.2380
France	Franc	.1930
Belgium	Franc	.1930
Switzerland	Franc	.1930
Italy	Lira	.1930
Greece	Drachma	.1930
Spain	Peseta	.1930
Russia	Ruble	.5150
Japan	Yen	.4980
Mexico	Peso	.4980
Brazil	Milreis	.5460
Argentine Republic	Peso	.9650
Holland	Guilder	.4000

Great Britain having always been the leader among the nations in world trade, London has become the financial center of the world and exchange on London is an acceptable medium of circulation in most countries. This means that the great bulk of international settlements is by means of London exchange.

The rate of exchange on London under normal conditions fluctuates by \$.0005 or multiples thereof, due to a combination of trade conditions including the corresponding expense of transporting gold.

Exchange on France, Belgium and Switzerland is quoted by giving the exchange value of \$1 in francs. Thus when exchange on Paris is quoted at 5.18 it means that \$1 will buy 5.18 francs. Exchange on Paris fluctuates by $\frac{5}{8}$ of a centime equal to $\frac{1}{8}$ of one cent. These rates are also modified for greater accuracy by adding or subtracting $\frac{1}{16}$, $\frac{1}{32}$ or $\frac{1}{64}$. It is well to observe that contrary to other quotations, the greater the number of francs that can be bought for \$1, the lower the rate, since the more francs one could buy with a certain amount of money.

Exchange on Germany is quoted by giving the exchange value of 4 marks in cents. When exchange on Berlin is quoted at $96\frac{1}{2}$, four marks are equal to $96\frac{1}{2}$ cents.

As illustrating the decline in exchange rates due to the European war, the following taken from the Boston Transcript of March 7, 1916, is of interest:

"The foreign exchange market was quiet and fairly steady. Rates as follows: Sterling, Cables, \$4.76 $\frac{3}{4}$; demand, \$4.76 $\frac{1}{8}$. Francs, 5.89; marks, 73 $\frac{3}{4}$; guilders, 42 $\frac{1}{2}$; lira, 6.70."

The discount rates at London, Paris, Berlin and other European centers have a material effect upon exchange rates for commercial bills. These discount rates are the rate per cent at which commercial paper of the different classes may be discounted. The rates fluctuate according to the trade conditions prevailing at the time.

To avoid confusion in a study of Foreign Exchange it should be borne in mind that trade between countries is conducted in a manner quite similar to domestic trade, the chief differences resulting from greater distance, different monetary standards and the commercial customs of different countries. To obtain payment for goods shipped to a foreign country which perhaps would not arrive at their destination for several weeks, it is the usual custom of the shipper to draw a commercial bill of exchange against the shipment and sell it at the best rate of exchange available.

The cost of exchange is from an accounting standpoint a charge against profits; the usual practice is to charge the cost of exchange to an exchange, or a Collection and Exchange account. Such an account would show cost of financing the purchase or sale and should be treated the same as domestic rates for collection of checks, interest and discount.

The process by which a foreign commercial bill of exchange is drawn against commodities exported, and by which the bill is handled and settled, is well illustrated by an actual transaction described by H. K. Brooks in a lecture on Foreign Exchange:

"A certain shipment of flour made by a leading exporter and destined to Liverpool, England, was delivered to the Soo freight line at Minneapolis, operating over the Minneapolis, St. Paul & Sault Ste. Marie and Canadian Pacific Railroads, a through bill of lading in duplicate being obtained. Such a bill of lading is issued by special arrangements with connecting ocean steamship lines by the terms of which it is agreed under conditions printed thereon, to transport to its destination. It states the number of packages, how they

are marked, their contents, the particular grade or brand of flour, and the name and address of the party for whom the goods are intended. It is negotiable only by endorsement of the exporter.

"Upon presentation of this evidence of shipment, a marine insurance company has issued a certificate of insurance, under the terms of which it agrees to reimburse the owner of the goods in case of the loss of the shipment by fire or accident while en route on the ocean. This shipment, as is the usual custom, is for about 10 per cent in excess of its billed value.

"The exporter then attaches to these documents a draft for the amount for which the flour was sold, namely, £457 12s. 10d.

"In this case the exporter agreed to allow the buyer sixty days' time in which to pay the draft, after its presentation. The draft reads '60 days after sight of this first of exchange (second unpaid), pay to the order of ourselves 457 pounds 12 shillings and 10 pence, against Soo line, through B. L. No. B. 1548, dated May 16, 1901, for 2,000 sacks of flour branded Dakota,' and is signed Northwestern Consolidated Milling Co., by H. E. Kent, cashier, who are termed the drawers. In the left corner it reads: 'To James Corwith & Co., Liverpool, Eng.' They are the buyers, or, as we term them, the drawees.

"Now, these three documents, drawn to the order of the exporters (Northwestern Consolidated Milling Co.), comprise a documentary commercial bill of exchange.

"Upon the same day that these documents were issued, and practically before the flour has started on its long journey, the exporters offered this bill of exchange for sale. It was sold to the Security Bank of Minneapolis at the rate of \$4.84 per pound, who in turn resold it to the American Express Co., at \$4.84½ per pound. The indorsements on the back of the draft read:

"Northwestern Consolidated Milling Co., H. E. Kent, Treasurer.

"Security Bank of Minnesota, Thos. F. Hurley, Cashier.

"Pay to the order of the National Provincial Bank, Liverpool.

"American Express Co., by Jas. F. Fargo, Treasurer.

"The latter indorsement shows the papers to have been sent to Liverpool for collection. The bank at Liverpool notified Corwith & Co. to call and accept the draft, which they did, by writing the word 'accepted' and the date over their signature.

"About fifteen days afterward the flour arrived by slow steamer, and, being in immediate need of it, Corwith & Co., in order to obtain the bill of lading, had to pay the draft; the instructions stamped on same being: 'Surrender documents upon payment only.'

"Now, as Corwith & Co. paid this draft forty-five days before it was due, the bank, as is customary, allowed them the prevailing rate of discount applicable to that class of bills, which was 2 per cent (or £1 3s. 5d.). The difference, £456 7s. 5d., less cost of revenue stamps, was placed to the credit of the American Express Co. by the bank which closed the transaction.

"Had the instructions on draft read 'Surrender documents upon acceptance of draft,' the bill of lading would have been delivered when draft was accepted, thus enabling Corwith & Co. to obtain goods at once and pay draft sixty days afterward if they desired.

"The method used in determining what this commercial bill was worth when buying it here was based upon the following:

1. What demand exchange upon Liverpool could be sold for.
2. The cost of revenue stamps to be affixed when draft was accepted abroad.
3. The interest for the number of days for which draft was drawn, plus three days' grace, at the rate per cent bill could be discounted.

For illustration:

\$4.8775	Demand rate on Liverpool.
0.00244	Cost of revenue stamp (1/20 of 1 per cent of rate or 1 shilling per 100 pounds).
<hr/>	
\$4.87506	
0.01676	Interest 63 days 2 per cent (discount rate).
<hr/>	
\$4.85830	Parity or cost per pound at maturity or if discounted.
4.84125	Rate per pound, at which purchased.
<hr/>	
\$0.01705	Profit per pound.
	Or \$7.78 on £457 12s. 10d."

ARBITAGE OF EXCHANGE or "arbitrage" is the method of making remittance to one country through the medium of exchange drawn upon another country, instead of making the remittance direct. This is done when the rate of exchange here, direct upon the country to which we wish to remit, is higher than if we were to buy exchange upon a third country through some bank which would then complete the transaction by remitting to the country where payment is to be made.

Illustration: Suppose a Boston banker wishes to remit to Paris 25,250 francs and the best rate at which same could be bought upon the market was 5.17½. This would call for \$4,879.23. If a draft on London could be bought at \$4.84 and the cable reports from London give quotations for London checks on Paris at 25.25 francs per pound sterling, for 1,000 pounds a check for 25,250 francs, payable in Paris, could be bought in London, and that the 1,000 pounds draft on London could be bought in Boston for \$4,840. Thus by remitting to Paris through London we would save the difference between \$4,879.23, cost of draft on Boston or Paris, and \$4,840, cost of draft in London on Paris, or \$39.23.

"A CROSSED STERLING CHECK is one payable either to bearer or order, having the name of a banker, or two parallel lines and the abbreviation '& Co.' written or printed across the face, thus: & Co. The effect is to direct the bank upon which it is drawn to pay the check only when coming to it through some other bank. It is intended as an additional safeguard against wrong payment.

"In most foreign countries it is the custom of bankers and others in the cashing of checks, whether drawn payable to bearer or order, to pay to the person presenting same, and under the laws existing in these countries, the paying bank or banker would not be held liable for payment to the wrong party. As a reason for this seemingly risky method, it is claimed that on account of the very severe penalty imposed for forgery under their laws, the requiring of strict personal identification, as exacted by banks within the United States, is unnecessary.

"As a precaution against wrong payment, however, the laws of Great Britain require that when a check is crossed, while not requiring personal identification, it must be cashed through some bank other than the one on which it was drawn."—*Brooks*.

88. A Boston importer buys goods from a Dresden manufacturer costing 21,320 marks. The importer buys from his banker a bill of exchange on Berlin at 95¾. Find cost of the bill of exchange.

89. Hubbard & Company purchase a bill of exchange on London at sight for £342 12s. 6d. at \$4.86½. What is the cost of the bill?

90. Bryant & Company purchase a bill of exchange on Paris for 33,250 francs for \$6,412.72. What was the rate of exchange?

91. A Liverpool merchant draws a bill of exchange at 3 days sight on a Springfield, Mass., merchant for £450 10s. 6d. The draft was presented by a local bank and paid by check. What was the amount of the check, exchange being at 4.85¼.

92. What are the proceeds of a documentary bill of exchange London for £528 8s. 6d. at 60 days sight if sold to a banker, the rate of exchange being 4.77½, interest 4%, revenue stamp 1/20% and commission ¼%.

93. Tiffany & Company import an invoice of statuettes and bronzes from Florence, Italy, amounting to 14,725.35 lira. They buy a 3-day sight draft of Brown Bros. Company on a Florence banker to pay the bill. What will they pay for the draft if the rate of exchange is 5.17½, commission ⅛%, revenue stamp 1/20%, discount rate 3%.

94. (From New York C. P. A. Examination, June, 1914.)

A manufacturing firm imports its raw material and purchases exchange on Europe in payment. How should the exchange account be treated with respect to the cost of production?

95. (From New York C. P. A. Examination, January, 1914.)

Explain the method of quoting French exchange in New York, also the following phrase used in a certain work on foreign exchange: "The higher the rate, the lower the quotation."

96. (From Massachusetts C. P. A. Examination, October, 1915.)

A banking concern deals in foreign exchange and the following are the transactions with a London correspondent for one month:

DEBITS		
Sept. 1	Remittance, thirty-day bill £400.....	@ 4.86
Sept. 10	Remittance, sight bill, £100-10-0.....	@ 4.87
Sept. 15	Remittance, demand bill, £200-0-6.....	@ 4.86¾
CREDITS		
Sept. 2	Draft, sight £300	@ 4.87½
Sept. 12	Draft, demand £200-12-5	@ 4.87
Sept. 20	Cable, £100	@ 4.88

- Ascertain the profit and loss in the account for the month.
- State the balance of the account at the end of the month in foreign and domestic currency, the current rate of sterling exchange being cable transfer 4.89.

97. (From New York C. P. A. Examination, June, 1915.)

A New York corporation builds a plant and establishes a branch in Liverpool, England. At the expiration of its fiscal period a trial balance is forwarded to the New York office, as follows:

Plant	£250,000	
Accounts Receivable	187,500	
Expenses	25,000	
Inventory (end of fiscal period)	50,000	
Remittance Account	150,000	
Cash	12,500	
Accounts Payable		£87,500
Income from Sales		250,000
New York Office		337,500
	<hr/>	<hr/>
	£675,000	£675,000

A trial balance of the New York books at the same date was as follows:

Capital Stock		\$2,500,000.00
Patents	\$1,500,000.00	
London Account	1,640,250.00	
Remittance Account		729,281.25
Expenses at New York	25,000.00	
Cash	64,031.25	
	<hr/>	<hr/>
	\$3,229,281.25	\$3,229,281.25

The Remittance account is composed of four sixty (60) day drafts on Liverpool for £37,500 each, which were sold in New York at \$4.85½, \$4.86, \$4.86½ and \$4.86¾, respectively.

Prepare a balance sheet of the New York books after closing and a statement of assets and liabilities of the Liverpool branch reconciled with the New York books. Close the books at rate of exchange on last day of fiscal period \$4.87¼ (conversion of remittance to be made at the average rate of the four bills).

98. (From New York C. P. A. Examination, June, 1915.)

A in London in current account with B of New York engages an accountant to prepare a statement, to be mailed to B, from the following data:

DEBITS		
1914		
May 12.....	£750	
May 30.....	117	
June 12.....	340	
July 1.....	150	
	<hr/>	
Total Debits		£1,357

CREDITS

1914	
June 10.....	£500
June 30.....	300
	<hr/>
Total Credits	800
	<hr/>
Balance	£557

Find the average due date of the account and the interest at 5% to July 1, 365 days to the year.

99. (From Illinois C. P. A. Examination, May, 1914.)

Mexican exchange has fallen considerably during the recent political disturbance in the Republic, say from 50 pesos to the U. S. dollar to about 35 pesos. What effect has this on the accounts of an American company, with its head office in Chicago, doing business in the Republic through a local branch office?

Describe fully, also, the effect of this fall in exchange in the accounts of two American companies with head offices in the United States, of which one operates a gold mine in Mexico, shipping all its product to New York where the metal is sold, and the other operating a local electric light and power plant in the Republic, buying all its materials and supplies in the United States; and state how the matter should be dealt with in the annual accounts of the respective companies.

100. (From New York C. P. A. Examination, January, 1914.)

Wright, Dunbar & Company, of New York, U. S. A., and Van Allen & Company, of Amsterdam, Holland, bankers and dealers in foreign exchange, enter into a joint venture on January 2, 1914, for the purpose of dealing in foreign exchange.

It is agreed that profits or losses are to be shared equally, that interest on the account current is to be figured at 6% per annum, exact number of days per month, and that guilders at sight are to be calculated at 40¼.

The blotter of the New York bankers records the following completed transactions for the joint venture of the first month's operations:

January 10, 1914

Received on a/c from Borton Bros., New York, and sent to Van Allen & Company, a/c joint venture, £2,000 on London, due February 10, 1914, at 4.87 sight and 4½%.

January 16, 1914

Received from Van Allen & Company value January 2, 1914, their draft on Wiener Bros., due February 25, 1914, kronen 48,000 on Vienna at 49½ guilders, 2 months, discount 4%.

January 16, 1914

Cable from Van Allen & Company that they have sold for account joint venture, value this day, £2,000 on London, due February 10, 1914, at 12 guilders, 2 months, discount 4%.

January 16, 1914

Discounted this day at National City Bank, New York, for a/c joint venture, value January 16, 1914, kronen 48,000 on Vienna, due February 25, 1914, at 20¼, 3 months, discount 4%.

January 27, 1914

Received from Van Allen & Company value January 13, 1914, their draft on Charles & Company, in Berlin, due February 13, 1914, Rm. 30,000 at 59 guilders, 2 months, discount 5%.

January 28, 1914

Sold for cash a/c joint venture, value this day, Rm. 30,000 on Berlin, due February 13, 1914, at .95, 3 months, discount 5%.

Prepare as at January 31, 1914:

- A statement showing separately the results of operations as conducted in New York and Amsterdam, respectively.
- The ledger accounts of the joint venture and of Van Allen & Company as kept by the New York firm of bankers.

PART X

EQUATION OF ACCOUNTS

Equation of Accounts is the process of finding the date on which an open account consisting of items falling due at different times may be paid without loss or gain to either debtor or creditor.

While the subject is no longer of great practical value due to the fact that terms of sale are much more definitely fixed than formerly, payments being made usually in accordance with the terms agreed upon, yet it is a subject with which all accountants should be familiar; furthermore, it is still the custom of certain wholesale houses and manufacturers to equate or average their accounts.

The averaging of accounts having items on only one side is termed *simple equation*, while the averaging of accounts containing both debit and credit items is termed *compound equation*.

Book accounts bear legal interest after coming due and non-interest bearing notes if not paid at maturity bear interest from that date. The theory upon which equation of accounts is based is that the interest on overdue items is canceled by the discount on payments made before maturity.

A *focal date* is any assumed date of settlement with which the dates of the several accounts are compared for the purpose of finding the average due date. Any date may be used as the focal date, although it is the general practice to use the latest date occurring in the account. Any rate of interest may likewise be used, although as a matter of convenience 6% should always be used.

SIMPLE EQUATION

PROBLEM I

Find the average date of payment of the following items appearing on the books of Wood, Campbell & Co. in account with Sponcer & Co. July 8, To Mdse., \$600; July 20, To Mdse., \$1,200; August 17, To Mdse., \$1,800.

Solution

Assume August 17 as the focal date.

If the \$600 is not paid until August 17 it is overdue 40 days, the interest for that time amounting to \$4. If the \$1,200 is not paid until August 17, is is overdue 28 days, the interest amounting to \$5.60. If the \$1,800 item is paid on the assumed due date, there would be no interest charge. If the total amount of the bill, \$3,600, is paid August 17, Wood, Campbell & Co. would lose \$9.60 interest. To avoid this loss the account should have been settled earlier.

The interest on \$3,600 for 1 day is 60 cents; hence, if the payment had been made one day earlier, the loss would have been 60c less. Therefore, the account should have been settled as many days before August 17 as 60c is contained times in \$9.60, or 16 days. Counting back 16 days from August 17 gives August 1, the equated date. Or expressed in the usual form as follows:

July 8.....	\$600	40 days.....	\$4.00
July 20.....	1,200	28 days.....	5.60
August 17	1,800	0 days.....	0.00
	\$3,600		\$9.60

Interest on \$3,600 for 1 day = 60c.

\$9.60 divided by 60c = 16 days, average term of credit.

August 17—16 days = August 1, equated date.

From the foregoing solution the following rule may be derived:

Select the latest date as the focal date.

Find exact time in days from the date of each item to the focal date and compute the interest on each item for the time as found. If a term of credit is given, add the term of credit to the date of the item using the maturity date in finding the time.

Divide the sum of the interest so found, by the interest on the total account for one day, the quotient being the number of days average time.

Count back from the focal date the number of days so found in order to ascertain the equated date.

COMPOUND EQUATION

PROBLEM II

The following account appears on the books of R. G. Laird & Co.:

J. K. Renshaw

May 1	Mdse.	\$1,840	May 10	Cash	\$600
June 1	Mdse.	1,200	May 20	Cash	900

Solution

Select June 1 as the focal date.

DEBITS			
May 1.....	\$1,840	31 days.....	\$9.506
June 1.....	1,200	0 days.....	0.000
	<hr/>		<hr/>
	\$3,040		\$9.506
CREDITS			
May 10.....	\$600	22 days.....	\$2.20
May 20.....	900	12 days.....	1.80
	<hr/>		<hr/>
	\$1,500		\$4.00

$\$3,040 - \$1,500 = \$1,540$ balance due on the account.

$\$9.506 - \$4 = \$5.506$ balance of interest due.

Interest on $\$1,540$ for 1 day = .2566.

$\$5.506$ divided by .2566 = 21.4 days or 21 days.

Counting back 21 days from June 1 we get May 11, the equated date.

The same reasoning should be applied to the calculation of interest on the debits as in Problem I. Our reasoning applying to the credits would be as follows: The \$600 paid May 10 was paid 22 days before the assumed date of settlement, the debtor being entitled to interest for this time amounting to \$2.20. The \$900 paid on May 20 or 12 days before settlement date entitles the debtor to \$1.80 additional interest. This leaves a balance of \$5.506 interest due from the debtor, hence the account should have been settled earlier as calculated above.

If the balance of the account and the balance of the interest are on the same side, the debtor owes not only the balance of the account but the interest thereon as well; hence he should have settled the account earlier, and we *count back* from the focal date to find the equated time.

If the balance of the account and the balance of interest are on opposite sides, the debtor has the balance of interest due him, and has the right to delay payment of the account beyond the focal date; hence we would *count forward* to find the equated time.

PROBLEMS

101. C. E. Elbert is debited on the books of William L. Abbott with the following items:

1914			
Dec. 1	To Mdse.....		\$450
Dec. 15	To Mdse.....		300
Dec. 30	To Mdse.....		150
1915			
Jan. 8	To Mdse.....		200
Jan. 18	To Mdse.....		300

Find the equated date of payment.

102. On what date may the following items be paid in one amount without loss of interest to either party?

Jan. 3	Mdse., 30 da.....	\$600
Jan. 14	Mdse., 1 mo.....	900
Jan. 20	Mdse., 60 da.....	800
Feb. 10	Mdse., 90 da.....	300

103. Find the equated date of payment of the following account:

E. H. ELDREDGE & CO.

Aug. 5	To Mdse	\$200.00	Sept. 8	Cash	\$240.00
Aug. 20	To Mdse., 2 mo.....	360.00	Oct. 5	60-day note with interest.....	250.00
Sept. 15	To Mdse., 30 da.....	520.00			

104. Find the equated date of payment of the following account:

GROVES & DAVIS

Feb. 1	Mdse., net	\$125.00	Feb. 8	Cash	\$100.00
Feb. 11	Mdse., 30 da.....	450.00	Feb. 15	Cash	500.00
Mar. 20	Mdse., 60 da.....	750.00	Mar. 25	Note 60 da. with interest.....	500.00
Mar. 28	Mdse., 30 da.....	1,000.00	Apr. 10	Note 30 da. without interest..	1,000.00
Apr. 5	Mdse., 10 da.....	200.00			

105. (From Illinois C. P. A. Examination, December, 1910.)

A. B. & Co. of Chicago supply goods to D. D. & Co. of Bloomington at various dates and the latter offers a four months note with interest at 5% added to the note from average date; the invoices are as follows:

August 14, 1911	\$2,700
September 5, 1911.....	3,950
October 17, 1911.....	1,290
November 12, 1911.....	780

Draw up the note, dating it at the average date.

106. (From Colorado C. P. A. Examination, December, 1913.)

Find the average date of payment of the following:

Apr. 5	Mdse.	\$415.00	May 4	Cash	\$275.00
May 21	Mdse.	327.00	May 15	Cash	112.00

107. From New Jersey C. P. A. Examination.)

What is the equated time for the payment of the balance of the following account?

HENRY M. DOREMUS

Mar. 16	Mdse., 4 mo.....	\$444.57	July 1	Cash	\$400.00
Mar. 30	Mdse., 60 da.....	376.82	July 20	Cash	375.00
Apr. 20	Mdse., 30 da.....	712.19	Aug. 16	Cash	700.00
May 17	Mdse., 4 mo.....	628.75	Aug. 30	Cash	600.00
May 28	Mdse., 4 mo.....	419.31			

Doremus desires to settle the above account on September 13, 1904. What amount of money should he pay?

108. (From Manitoba C. A. Examination, May, 1910.)

Find the due date of the balance of the following account, and what amount will be required to settle it on the 1st day of May, 1910, interest being charged at the rate of 6% per annum.

Jan. 1	Mdse., 30 da.....	\$800.00	Feb. 1	Cash	\$500.00
Jan. 20	Mdse., 30 da.....	500.00	Nov. 15	Cash	275.00
Feb. 1	Mdse., 30 da.....	700.00			
Feb. 20	Mdse., 30 da.....	600.00			

109. (From Maryland C. P. A. Examination, January, 1909.)

What is the average date of the following account?

JAMES HENDERSON

Mar. 9	Mdse.....	\$300.00	Mar. 20	Cash.....	\$247.00
May 12	Mdse.....	474.00	May 14	Cash.....	400.00
June 19	Mdse.....	564.00	July 10	Cash.....	260.00

110. (From Michigan C. P. A. Examination, July, 1909.)

What is the average date of the following:

- \$114 due Apr. 10; \$140 due Apr. 26; \$320 due May 22.
- June 3, \$375 on 30 days time; June 28, \$420 on 60 days time; July 16, \$560 on four months time; September 4, \$228 on 90 days time.
- Dr. May 16, \$437; May 31, \$324; Cr. May 23, \$400; June 16, \$300.

PART XI

SPECIAL INVESTIGATIONS

111. (From New York C. P. A. Examination, June, 1909.)

A firm manufacturing but one grade of cloaks, insured against burglary, claims to have been robbed on the night of September 10th.

The proof of the loss filed by the assured contained two items for 600 cloaks, \$12,000; silk, 1,000 yards, \$1,500.

An inventory of the stock on hand, consisting of cloaks, cloth and silk, had been taken January 1, amounting to \$118,500, the particulars of which have been lost or destroyed.

An analysis of the firm's books produced the following information:

Purchase of cloth, 37,500 yards at \$1.00.

Purchases of silk, 10,000 yards at \$2.00.

6,000 cloaks were manufactured, consuming, cloth, 40,000 yards at \$1.00; silk, 10,000 yards at \$2.00.

9,000 cloaks were sold between January 1 and September 10.

Cost of sales, per cloak, for material	\$10.00
Cost of sales, per cloak, for labor and sundries	7.00
	<hr/>
	\$17.00
Inventory, September 11, 2,500 cloaks at.....	\$17.00
12,500 yards cloth at.....	1.00
5,000 yards silk at.....	2.00
Prepare a report proving or disproving the claim.	

112. (From New York C. P. A. Examination, January, 1913.)

Karl Smith is a real estate broker and agent who, among other things, manages properties in consideration of commissions, ranging from 3% to 5% on rent collections. For the last two years his books have been kept in haphazard fashion and in violation of the law of agency. They are incomplete as to footings and postings; no trial balance of the general ledger has been obtained and no reconciliations of bank balances has been established during the above-mentioned period. The tenants' rent book is a species of "tickler" in which the current rent charges are entered in pencil and inked in when paid; the names of the tenants of properties not leased are also entered in pencil and erased when the tenants move, the new names being entered in the places thus left vacant.

Having accidentally discovered irregularities in the tenants' book, Karl Smith has discharged his book-keeper-cashier and engaged an accountant to conduct an examination of his books, records and accounts, discover the extent of the shortage, which he fears is considerable, and install a new system of accounts.

After spending considerable time in an attempt to place the books on an accounting basis, the accountant finally obtains the following trial balance of the ledger, as of September 30, 1912, installs a new system which will permit his client to fulfil his accounting duty as an agent and renders a preliminary report accompanied by a statement showing clearly the financial status of the relations of Karl Smith to his principals:

TRIAL BALANCE

Cash	\$350.20	Karl Smith, capital.....	\$1,360.40
Petty cash	100.00	Commissions	22,510.00
The Augusta Terrace (a).....	216.00	Phoenix Ins. Co.....	470.00
The Victoria Court (a).....	805.00	London Ins. Co.....	450.10
The St. Quentin Court (a).....	650.00	The Frederic Apartment (f).....	2,385.30
The Audubon Court (a)	270.00	The Venetian Court (f).....	2,500.00
The Evening Despatch (b).....	75.00	The Franklin Castle (f)	3,231.00
The Morning News (b).....	35.00	St. Martin Hall (f).....	2,850.70
The Union Wall Paper Co. (b).....	111.20	Tenants	1,550.00
The Janitors' Supplies Co. (b).....	45.25		
Insurance account (c).....	920.10		
Karl Smith, drawings (d).....	16,930.00		
Cash shortage (e)	380.00		
Salaries	12,140.00		
Office expense	3,130.00		
Furniture and equipment.....	4,150.75		
	<hr/>		<hr/>
	\$40,307.50		\$40,307.50

Notations by the accountant:

- Remittances on account of collection of October rents paid in advance upon signing lease, not as yet credited to principals. Settlements to be made on the 29th of every month.
- Balances represent payments from March to June, 1912, for advertising, decorating and supplies, for the account of managed properties. Paid bills cannot be found; no detail available; itemized receipted bills asked for by letter; no answer at September 30, 1912.
- Premiums on fire insurance placed by agent for account of sundry clients not principals. Premiums will be paid to agent if risk is accepted and he will deduct commissions of from 5% to 15% from settlement with companies.
- Probably contains charges which might properly be capitalized under caption "Furniture and Fixtures" if positive information were available.
- Entries made in cash book by accountant, for rent collections appearing in monthly statements to principals but not appearing in cash book or in duplicate of bank deposits obtained from banks.
- According to the terms of his employment the agent must remit on the fifth day in every month.

Prepare the preliminary report and the statement submitted by the accountant to Karl Smith, as at September 30, 1912.

113. (From Virginia C. P. A. Examination, October, 1913.)

A lumber company issues the following statement and one of the stockholders submits it to you as he cannot understand how 135,000 ft. sold at average of \$8.15 per M can produce a profit of \$370.00 with a cost of \$6.50 per M. Make your report with reasons why the statement is in error and illustrate with a new statement of operation applying the inventories where they correctly belong at proper value and showing the cost of each operation and the cost of the material as it works through from operation to operation.

PINE TOP LUMBER COMPANY

Statement of Operation—June 1, 1913

INCOME		Average
Sales:		Cost
100,000 ft. rough lumber.....	\$750.00	\$7.50
35,000 ft. dressed lumber.....	350.00	10.00
	<hr/>	<hr/>
	\$1,100.00	\$8.15

EXPENSE

		Average Cost
Logging		
400,000 ft.	\$1,200.00	\$3.00
Hauling to mill		
300,000 ft.	300.00	1.00
Sawing at mill		
200,000 ft.	300.00	1.50
Planing		
50,000 ft.	50.00	1.00
	<u>\$1,850.00</u>	<u>\$6.50</u>
Less Inventory (Estimated Value):		
100,000 ft. logs in woods at \$2.50.....	\$250	
100,000 ft. logs at mill at \$4.00.....	400	
50,000 ft. rough lumber at \$7.00.....	350	
15,000 ft. dressed lumber at \$8.00.....	120	
	<u>1,120.00</u>	
Cost	\$730.00	
Profit	370.00	
	<u>\$1,110.00</u>	

PART XII

MISCELLANEOUS

114. (From Massachusetts C. P. A. Examination, April, 1911.)

Alfred Avery, while solvent, was unable to continue without additional credit; his condition was as follows:

ASSETS		LIABILITIES	
Plant	\$25,198	Creditors	\$20,230
Cash	212	Capital	50,000
Material—Raw and in process.....	40,400	Surplus	4,900
Finished Goods	6,070		
Accounts Receivable	3,250		
	\$75,130		\$75,130

His creditors decided to loan him \$5,000 in cash, and to allow him additional credit for necessary materials.

His subsequent operations were as follows:

Purchases on book account charged to materials, \$5,100; to expense, \$12,000; sales on book account, \$57,802; losses on bad debts, \$300; loans from creditors, \$5,000; receivables collected, \$58,100; cash payments for labor, \$12,500; for expense, \$4,350; for plant, \$600; paid creditors, \$42,030; personal drawings, \$3,000.

There remained raw material, \$4,000; finished goods, \$22,388.

Prepare cash account, working account and balance sheet at close of operation.

115. (From Massachusetts C. P. A. Examination, June, 1912.)

The trial balance of the A. B. Co. on *January 1, 1912*, appears as follows:

Cash	\$50,100	Reserve for disc. accts. receivable, Jan. 1, 1911	\$12,000
Accounts receivable, gross.....	400,000	Reserve for disc. mdse. inventory, Jan. 1, 1911	12,000
Notes receivable	30,000	Accounts payable	90,000
Merchandise inventory, Jan. 1, 1911, gross	240,000	Notes payable	600,000
Merchandise purchases to Jan. 1, 1912..	1,250,000	Sales	1,500,000
Prepaid interest, Jan. 1, 1911.....	12,500	Purchase discounts, collected on settlements with creditors.....	59,500
Interest, paid to Jan. 1, 1912.....	36,000	Reserve for bad debts, Jan. 1, 1911.....	3,000
Expenses, paid to Jan. 1, 1912.....	156,000	Mdse. returned to creditors to Jan. 1, 1912	50,000
Reserve for disc. accts. pay., Jan. 1, 1911	4,000	Collected on accts. charged to P. & L. in 1910	500
Bad debts, charged off to Jan. 1, 1912...	2,500	Credit insurance, received on 1910 losses	1,000
Returned sales customers.....	100,000	Profit and Loss, Jan. 1, 1911.....	55,000
Salaries	20,000	Capital stock	225,000
Taxes	5,000		
Plant	250,000		
Discounts allowed customers.....	51,900		
	\$2,608,000		\$2,608,000

The following information is stated:

Accounts Payable, January 1, 1911, Gross, \$80,000.

Accounts Receivable, January 1, 1911, Gross, \$300,000.

Notes Payable, January 1, 1911, \$500,000. Interest paid at 5% to July 1, 1911.

On July 1, 1911, \$500,000 is renewed at 6% for 1 year and \$100,000 additional is borrowed at same rate for one year.

Inventory, January 1, 1912, \$320,000 Gross.

Goods bought on terms of 5% 30 days.

Goods sold on terms of 4% 30 days.

Reserve for Bad Debts, January 1, 1912, to be 1% on Gross Accounts Receivable.

- Submit: a. Working Account showing Operating Profit.
 b. Profit and Loss Account.
 c. Balance Sheet.

116. (From Massachusetts C. P. A. Examination, October, 1914.)

The books of the X Manufacturing Company were audited to December 31, 1913, and in making up the Balance Sheet and Profit and Loss Account at that date the auditors recommended the following adjustments:

- Transferred to Profit and Loss, \$4,231.07, which had been charged to real estate and buildings in error.
- Provided for depreciation of buildings, etc., \$7,200.
- Adjusted salaries amounting to \$1,400.00 due for 1913 services, but not entered on the books until January, 1914.
- Reduced the amount of Inventory because of errors, \$12,000.

The same auditors were again called in to audit the books to June 30, 1914, and found that the above adjustments had not been entered in the books. They also found that during the half year \$1,000.00 had been charged to real estate, buildings, etc., instead of to expense; that no provision had been made for depreciation for the period amounting to \$3,600.00 and that the inventory had been footed \$10,000.00 too much. Also that the unexpired insurance amounted to \$750.00 more than was entered on the books. The following are condensed trial balances of the X Manufacturing Company books as the auditor found them as of December 31, 1913, and June 30, 1914:

	December 31, 1913	June 30, 1914
Real Estate, Buildings, etc.....	\$102,840.26	\$115,226.80
Capital Stock	\$200,000.00	\$200,000.00
Debentures	100,000.00	100,000.00
Cash	14,672.14	22,143.21
Accounts Payable	9,431.17	11,698.21
Accounts Receivable	22,436.10	28,250.40
Loans	10,000.00	5,000.00
Stocks and Bonds	17,502.50	19,150.00
Inventory	246,153.42	288,360.14
Unexpired Insurance	1,471.23	742.26
Surplus	85,644.48	85,644.48
Profit and Loss 1914.....		71,530.12
	<hr/>	<hr/>
	\$405,075.65	\$473,872.81

From the foregoing facts prepare:

- A correct Balance Sheet June 30, 1914.
- State the adjusted amount of profits for the half year to June 30, 1914.
- Prepare statement reconciling the Balance Sheet figures with the original Trial Balance of June 30, 1914.

117. (From Massachusetts C. P. A. Examination, October, 1914.)

A Trading Stamp Company sells its stamps for \$5.00 per M. They redeem these stamps in cash for \$4.00 per M. or in premiums which average to cost \$4.50 per M. The income on the investments is \$8,748 per year. They estimate that 5% of the stamps sold will lapse and never be redeemed. They anticipate the profit at the rate of 10% on the balance of stamps sold after deducting the redemptions and estimated lapses.

The Trial Balance of *January 31, 1913*, is as follows:

Balances—January 31, 1913:

Cash	\$23,510.00	
Stamps on hand at cost.....	1,525.00	
Investments in Bonds.....	152,825.00	
Good will	100,000.00	
Premiums at cost.....	38,710.00	
Capital		\$100,000.00
Accounts Payable		6,010.00

Balances—January 31, 1913, which have not changed since Dec. 31, 1913, and are to be adjusted by the January operations:

Accrued Interest	2,475.00	
Lapses	76,388.00	
Anticipated Profits	23,577.00	
Unredeemed Stamps		312,158.00
Surplus		8,717.00

Balances—January 31, 1913, showing operations for January:

9,600,000 Stamps redeemed in January in premiums	43,200.00	
4,912,500 Stamps redeemed in January in cash	19,650.00	
Stamps sold in January.....		65,000.00
Expenses January	10,525.00	
Coupons collected in January.....		500.00
	<hr/>	<hr/>
	\$492,385.00	\$492,385.00

Submit an operating account and profit and loss account for the month of January and a balance sheet January 31, 1913.

118. (From Massachusetts C. P. A. Examination, October, 1915.)

"A" is a manufacturer of carpets and his balance sheet at December 31, 1913, is as follows:

ASSETS		
Cash in Bank.....	\$815.00	
Real Estate	20,000.00	
Machinery	40,000.00	
Accounts Receivable	7,227.50	
Inventory—Finished Goods	11,000.00	
Inventory—Goods in Process.....	850.00	
Inventory—Raw Materials and Supplies.....	107.50	
	<hr/>	\$80,000.00
LIABILITIES		
Notes Payable	\$22,000.00	
Accounts Payable	28,000.00	
Capital Account	30,000.00	
	<hr/>	\$80,000.00

"A" agrees with "B" to sell him one-half interest in the business for the sum of \$20,000 to be contributed to the new firm, the new firm to take over the assets of "A" with exception of real estate as of December 31, 1913, and assume all its liabilities. The Goodwill of the business of "A" should be rated at \$20,000 in the new books.

It was discovered shortly after the commencement of business of the new firm that the inventory of finished stock was incorrect and that the value should have been stated at \$8,500 instead of \$11,000, and that of the Accounts Receivable only \$6,227.50 was collectable, one of the debtors having failed and absconded, leaving no assets, previous to the formation of the partnership, which fact was known to "A" and

his bookkeeper had been instructed to charge off the account but had failed to do so. No correction had been made of these discrepancies, and the trial balance at the end of the year's business showed as follows:

"A" Capital Account.....		\$25,000.00	
"B" Capital Account.....		25,000.00	
"A" Personal Account.....	3,100.00		
"B" Personal Account.....	3,100.00		
Merchandise			78,000.00
Accounts Receivable	15,400.00		
Expense	1,500.00		
Machinery	40,000.00		
Manufacturing Expense	22,000.00		
Wages	44,000.00		
Rent	1,500.00		
Profit and Loss.....	600.00		
Accounts Payable			45,200.00
Cash	22,000.00		
Goodwill	20,000.00		
		<u>\$173,200.00</u>	<u>\$173,200.00</u>

The Inventory at close of the year December 31, 1914, was:

Finished Goods	\$28,000.00	
Goods in Process.....	1,500.00	
Raw Material and Supplies.....	1,500.00	
	<u> </u>	\$31,000.00

No amount has been charged off for depreciation of machinery, which should be 10%.

Make proper entries to correct books and formulate balance sheet showing the standing of the firm December 31, 1914.

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